United States Department of Agriculture

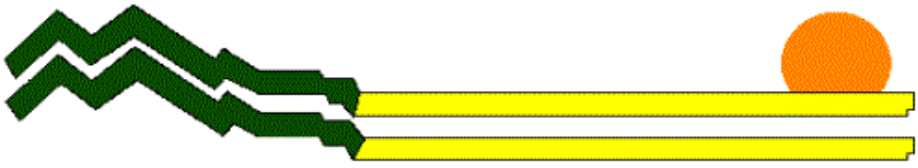
Forest Service

Rocky Mountain Region

Pike and San Isabel National Forests and Cimarron and Comanche National Grasslands

Annual Monitoring Report for Fiscal Year 2009

July 1, 2010



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1. Introduction

The Pike and San Isabel National Forests (Forests) and the Cimarron and Comanche National Grasslands (Grasslands) (collectively referred to as the PSICC) include 2.8 million acres of public lands. These four units are located in central and southeastern Colorado and in southwestern Kansas. Management of the PSICC is very complex because it spans a variety of ecosystems, social, and economic settings, and must be integrated with the needs of two state governments and 17 counties.

The 1984 land and resource management plan (1984 Plan) for the PSICC focuses on resource needs and the desires of the diverse publics being served. Predicted rates of accomplishment corresponded with the needs identified in the 1984 Plan. As is apparent in many of the following sections, implementation has not kept pace with predicted rates.

2. Physical Components

2.1. Soil and Water Resources

The soil and water resources program provides the technical information necessary to ensure these resources are sustainable as identified in the National Forest Management Act (NFMA). Management decisions made to implement actions under the 1984 Plan are done so by considering soil and water resources data and other technical information. Program monitoring is divided into three major functions:

1. Soil inventory
2. Soil and watershed improvement
3. Soil and water quality

2.1.1. Soil inventory

Conducting soil inventories is a prerequisite to land management planning and implementation. Collecting baseline data is a fundamental requirement supporting resource management mandates identified in NFMA. Modern soils inventories use an integrated approach to describe and map biotic and abiotic features: geology, landforms, climate, vegetation, and soils. Soil surveys in eight major areas[1] on the PSICC have been conducted in cooperation with other Federal and State agencies. Each survey area differs in the quality of mapping, available interpretations, and status. Two areas (the eastern portion of the Pike National Forest and Morton County) have current published surveys. The mapping, draft manuscripts, and interpretations have been completed for the remaining survey areas.

[1] Pike National Forest, eastern part; Wet Mountains and Spanish Peaks; northern San Isabel National Forest and western Pike National Forest; Sangre de Cristo Range; Morton County, Baca County, Otero County and Las Animas County.

2.1.2. Soil and watershed improvement program

The future use of Federal lands depends on the protection and maintenance of soil and water resources. Improving watershed conditions is important for maintaining long-term ecosystem health at local and landscape levels. The program goals are to prescribe and implement land treatments, and in some cases to modify management to:

1. Protect life and property.
2. Protect and improve water quality consistent with the Clean Water Act.
3. Reduce or minimize erosion and sediment damage.
4. Improve species habitat.
5. Increase long-term soil productivity.
6. Ensure long-term health and sustainability of watersheds given the variety of demands on the land.

Direction in the 1984 Plan includes improving 440 treated or 1,200 affected acres per year. Figure 1 shows the number of treated acres from 1985 to the present. The PSICC has implemented over 400 soil and water improvement projects since implementation of the 1984 Plan, totaling more than 35,000 acres of treated or improved lands, excluding areas rehabilitated following wildfire (see Burned Area Rehabilitation, below). In 2009, 194 acres of soil and watershed improvements were reported.

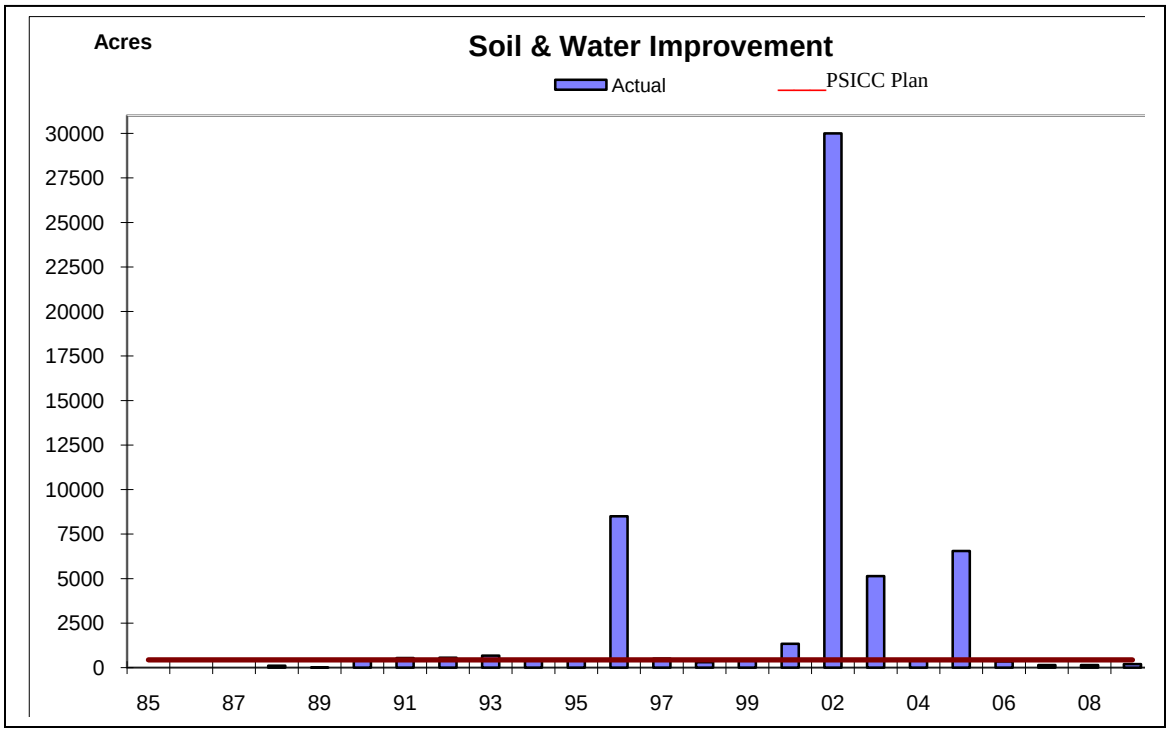

Figure 1. Soil and water improvement

Over the past 23 years, soil and watershed improvement projects have focused on watersheds and stream systems that exceed Federal and State water quality thresholds and standards for sedimentation. Although the PSICC is making progress in restoring degraded watersheds, much

work remains to be done.

2.1.3. Watershed assessments

Watershed assessments are developed so that we can be more responsive to watershed improvement needs and landscape health issues across the PSICC. Watershed assessments allow identification of status, trend and interrelationships of and between resource conditions. This work sets the stage for determining and prioritizing watershed improvement projects and other management opportunities giving consideration to desired future conditions and cumulative effects. The San Isabel National Forest, the Wet Mountain assessment on the San Carlos District and the Tennessee-Arkansas assessment on the Leadville District are completed. No watershed assessments were completed in 2009.

2.1.4. Burned area rehabilitation

Since 1996, eight wildfires have been approved for Burned Area Emergency Rehabilitation (BAER) funding (Buffalo Creek, Big Turkey, Hi Meadow, Snaking, Schoonover, Hayman, Steeler, and Mason Gulch). This has been in addition to the 1984 Plan projected level of watershed improvement projects. More than 34,000 acres have been rehabilitated using techniques that include scarification, revegetation and seeding, overland flow reduction, and sediment transport reduction treatments using straw wattles, log erosion barriers, and directional felling. The Hayman Fire (137,760 acres) and the Mason Gulch Fire (11,357 acres) were the two largest burns in recent years. Major flood events accelerating erosion have occurred within the perimeters of these fires. Runoff from these flood events caused increased sediment levels to drainages within and downstream of the burn areas, contributing to watershed degradation**.** Road improvements and BAER monitoring occurred in the Hayman and Mason Gulch burn areas in 2009. Weed treatments occurred in the Hayman and Mason Gulch burn area in 2009. Photo points, water quality, gully cross sections, erosion bridges, vegetation transect, and sediment weirs were used to monitor watershed recovery in the Hayman burn area. Ongoing BAER effectiveness monitoring and water chemistry monitoring are being analyzed at the Rocky Mountain Research Station (RMRS).

2.1.5. Soil and water quality monitoring

Monitoring soils and water quality provides information about the effects of management decisions and subsequent actions involving soil and water. State and Federal regulations, 1984 Plan standards and guidelines, and the watershed condition analysis for seriously degraded and high value stream segments on the PSICC (USDA FS 1998) give long-term objectives and monitoring guidelines used to measure changes in soils and watersheds.

Work is ongoing on the 1998 and 2002 303d-listed streams on the PSICC. A total maximum daily load (TMDL) for the Upper South Platte River was prepared in fiscal year (FY) 2002; the Forest Service continues to implement and monitor water quality restoration measures recommended by the TMDL. The Forest Service, in conjunction with the Colorado Department of Public Health, has completed a draft Phase I version of the TMDL for Trout Creek. Cross sections near Deckers on the South Platte River were monitored for sediment aggradation and

erosion in conjunction with the Colorado Division of Wildlife (CDOW). Planning and monitoring are underway to implement the TMDL for the Happy Meadows reach of the South Platte River, South Park Ranger District. Planning is underway to implement restoration efforts of road derived sediment on Sugar Creek, South Platte Ranger District. New monitoring at Williams Creek was established in 2008 to monitor water quality for lead pollution. All monitoring data is entered into the corporate soils and water databases maintained by the PSICC.

Water quality monitoring of streams affected by the 2002 Hayman fire occurred on eight streams. Water quality monitoring of the effects of timber harvesting was established in Harris Park on the South Platte District.

Soil and water quality monitoring is also tied to project implementation. In 2006, the Forest hydrologist, soil scientist, zone hydrologists and representatives from the six Forests districts and the two Grasslands districts, conducted field monitoring to evaluate best management practices (BMPs) effectiveness. BMPs are used to ensure compliance with State and Federal regulations and with the 1984 Plan standards and guidelines. In 2009, staffing reduction did not allow BMP monitoring as an interdisciplinary team on all units.

The Forests and Grasslands completed several soil and water projects across multiple districts in 2009 totaling 194 acres.

- Comanche
    - Picture Canyon spring restoration (3 acres)
    - Tamarisk Treatments (70 acres)
    - Purgatory stabilization around dinosaur tracks (5 acres)
- Cimarron
    - Stabilization around ponds (5 acres)
- San Carlos
    - Dispersed campsite closures and drainage improvements along South Colony Rd and motorized trail closure from private property to Rudolph Mtn. (5 acres)
- Salida
    - Dispersed camping site closures (2 acres)
    - Stream-bank stabilization (6 acres)
- Leadville
    - Halfmoon Creek dispersed campsite restoration (20 acres)
- Pikes Peak/South Platte/South Park
    - Pikes Peak Highway erosion control (25 acres)
    - Rampart Range Rd, Mt. Hermon Rd. 341A, Gold Camp area and Rainbow Falls road stabilization (15 acres)
    - Trail Creek river restoration (15 acres)
    - Bear Creek bridge and trail rehabilitation (5 acres)
    - Trail Creek Road rehabilitation (3 acres)
    - Trout/Eagle Creek restoration project (15 acres)

Range allotment management plans (RAMPs) and monitoring have incorporated proper functioning condition monitoring to determine the effect of livestock grazing on soil and water

resources.

2.1.6. Soil quality standards

The PSICC uses the soil quality standards established for the Rocky Mountain Region of the Forest Service (Region 2). These provide threshold values to document major reductions in soil productivity potential. These values act as early warning signs to indicate when further alteration of soil properties would extensively change or impair soil productivity. Past project implementation soils monitoring included visual assessments of contract provisions and project mitigation designed to reduce the degradation of soils and water resources. These projects include or involve timber and salvage sales, roads, trails and facility construction and maintenance, and recreation-related activities. More detailed and quantitative soils monitoring is being conducted through these project level soil monitoring requirements. Specifically, soil compaction related to livestock grazing and erosion related to BAER treatments and OHV use is monitored. In the future, both qualitative project monitoring and more detailed studies of specific management uses and issues on the PSICC will be conducted.

2.2. Water Rights

Three goals of the PSICC water rights program are to:

1. maintain current water rights
2. protect and maintain channel stability and capacity on streams
3. assess and potentially accomplish any proposed increase in water use or resource activity

The PSICC will continue reviewing the monthly water court resumes in Water Division 1 (South Platte Basin) and Water Division 2 (Arkansas Basin) and filing Statements of Opposition to any of the filings that may potentially violate or threaten the rights held by the Forest Service. Through these reviews the PSICC learns about individuals seeking water rights on the Forests or Grasslands that may not hold special-use permits for the requested use. Rather than filing a Statement of Opposition opposing the request, the PSICC would sometimes send a letter to the applicant about the special-use permitting procedures. Unless the water right application is for an "absolute" water right, the Forests and Grasslands file a Statement of Opposition instead of the letter explaining the USFS special-use permitting process.

The PSICC continued to work on augmentation requirements for Lake Isabel and Manitou Lake in 2009. The State of Colorado is requiring the PSICC to augment for water lost due to evaporation on both lakes. Due to the nature of the potential purchase of water rights, recommendations have changed numerous times according to availability and use of water rights for sale. Because of the high cost to purchase water, and the availability of water rights for sale being somewhat diminished, the PSICC is now looking at the possibility of a long term lease to take care of these augmentations needs. The PSICC is continuing to seek out augmentation sources for these two reservoirs.

The PSICC continues working on getting long-term special-use permits issued for North Fork, Boss and O'Haver reservoirs on the Salida District. The process this past year has included

meeting with the engineer for the Upper Arkansas Water Conservancy District, sending a letter to the State of Colorado, Division of Water Resources, asking for questions to be answered and documents to be sent, and reviewing the documents from both the Upper Arkansas Water Conservancy District and the State of Colorado in response to our requests.

In 1979, the PSICC filed for reserved rights in Water Division 2 (Case No. 79CW176). The PSICC is currently trying to assess the status of the applications for reserved rights that were withdrawn (approximately 200). Once assessment is complete, a decision will be made on an applications that might have to be filed as a result. This has been an ongoing effort for the past two years.

The PSICC was scheduled to complete a couple of water rights management projects in FY 2009. The Leadville district is in line to repair the Sill headgate and the South Platte district plans to install the Price # 1 headgate.

2.3. Air Resources

This section describes the known conditions for air quality on or near the PSICC by the various pollutants that are thought to pose the greatest threats to forest and grassland ecosystems and recreation settings.

In response to requirements in the Clean Air Act, in 1994 the PSICC initiated a long-term monitoring program to develop baseline data for evaluating air quality-related values across the PSICC, especially in wilderness areas. See Table 1 for the locations of air monitoring sites currently managed by the PSICC.

Table 1. Air quality monitoring sites managed by the PSICC (2008)

Air quality monitoring site	Measured characteristics	Year established
Mount Evans Wilderness – Upper Bears Tracks Lake	Acid deposition	1994
Mount Evan Wilderness – Frozen Lake	Acid deposition	1994
Mount Evans Wilderness – Abyss Lake	Acid deposition	1994
Sangre de Cristo Wilderness – Upper Stout Lake	Acid deposition	1994
Sangre de Cristo Wilderness – Lower Stout Lake	Acid deposition	1994
Manitou Experimental Forest	Acid deposition Ozone	1978
Kenosha Pass	Ozone	2005
Guanella Pass	Ozone	2005
Trout Creek Pass	Ozone	Planned for 2009

Air quality monitoring site	Measured characteristics	Year established
Cimarron National Grassland	PM10 and other particulates Mercury	1994

2.3.1. Ozone

Ground-level ozone is formed when oxides of nitrogen (NOx) react with volatile organic compounds (VOCs) in the presence of sunlight. Emissions from industrial facilities, electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of NOx and VOC. Sunlight and warm weather accelerate the reaction, which is why ozone is typically a summertime pollutant. At high concentrations, ground-level ozone can damage plant tissues and adversely impact plant growth and health. At higher concentrations, ozone can impact public health.

The Forest Service has initiated ozone monitoring in Forests by installing a continuous ozone monitor at Kenosha Pass and a passive ozone monitor in the Manitou Experimental Forest. Though specific concentrations are not available at this time, a preliminary analysis suggests ozone levels increase with elevation.

In November 2007, several counties around the Denver area were designated as "Non-Attainment" with respect to the National Ambient Air Quality Standards (NAAQS) for ozone. These counties include Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson, as well as the southern half of Larimer and Weld counties. The Pike National Forest is partially located in Jefferson and Douglas counties. While the rest of the state is in attainment for ozone, a June 2007 EPA proposal to strengthen air quality standards for ozone would reduce the primary 8-hour standard from 0.08 parts per million (ppm) to a level within a range of 0.070 to 0.075 ppm. This may have implications for areas that are in compliance but near the 8-hour standard, such as El Paso County. EPA expects new designations of attainment/non-attainment to take effect in 2010.

EPA uses a national network of monitoring sites to measure ambient ozone concentrations. According to the EPA, from 1990–2006 thirty-four sites in Colorado have been used to measure ozone for at least one year; nineteen of these sites were in operation in 2007. None of the sites are located within the PSICC, but several are located adjacent to the PSICC. A cluster of sites are located in Denver county and the northern half of Jefferson County. Four sites border the PSICC near Colorado Springs. One site is located at the Great Sand Dunes National Park, in the vicinity of the San Isabel National Forest.

Data obtained from the sites near Colorado Springs suggest stable levels of ozone throughout the 1990s, where 8-hour average levels ranged between approximately 0.05–0.06 ppm from 1990–1997. More recent data reported by EPA for the Colorado Springs area indicate levels are approaching the national standard of 0.08 ppm. Closer to Denver County, ozone concentrations have exceeded the national standard at sites located closest to the Pike National Forest. At the Great Sand Dunes National Park, the most recent data is from 1991, where ozone was measured at approximately 0.06 ppm

2.3.2. Nitrogen oxides

Nitrogen oxide (NOx) is a generic term for a group of highly reactive gases, all of which contain varying amounts of nitrogen and oxygen. The criteria pollutant nitrogen dioxide (NO_2), along with other particles in the air, can often be seen as a reddish-brown layer over many urban areas. Nitrogen oxides form when fuel is burned at high temperatures, as in a combustion process. The primary manmade sources of NOx are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuels.

NOx is one of the main contributors to the formulation of ground-level ozone when it reacts with volatile organic compounds (VOCs) in the presence of sunlight. In addition, NOx reacts to form nitrate particles, acid aerosols, as well as NO_2, all of which can cause respiratory problems. NOx also contributes to the formation of acid rain, contributes to nutrient overload that deteriorates water quality, and contributes to atmospheric particles that cause visibility impairment in national parks and wilderness areas. NOx and the secondary pollutants formed from NOx can be transported over long distances, following the pattern of prevailing winds in the U.S. Therefore, problems associated with NOx are not confined to where NOx are emitted.

EPA uses a national network of monitoring sites to measure ambient NO_2 concentrations. From 1990–2006, 21 sites in Colorado have been used to measure NO_2 for at least one year. A cluster of sites border the Pike National Forest in the Denver area, and nine sites are located in western El Paso County near the boundary of the Pike National Forest.

The entire State of Colorado is in attainment for nitrogen. EPA monitoring sites near Colorado Springs in western El Paso County show concentrations well below federal standards as recent as 2001. The cluster of monitors around the Denver area show similar compliance with standards.

2.3.3. Particulate matter

Particulate matter (PM) is the primary air pollutant created by activity on the Forests, especially from prescribed burning and wildfires. PM is a complex mixture of extremely small particles and liquid droplets and can consist of a number of components including acids, organic chemicals, metals, and soil or dust particles. PM can be emitted directly from sources such as construction sites, unpaved roads, fields, smokestacks, prescribed burns and wildland fires. It can also form when chemicals such as sulfur dioxides and nitrogen oxides react in the atmosphere after being emitted from power plants, industries, or automobiles. These "secondary particles" make up most of the fine particle pollution in the country

PM is regulated at two distinct levels or sizes, PM10 and PM2.5. PM10 or particles 10 micrometers in diameter or smaller can generally pass through the throat and nose and enter the lungs causing serious health effects. PM2.5 or particles 2.5 micrometers in diameter and smaller are the major cause of reduced visibility (haze) in parts of the U.S., including many national parks and wilderness areas.

The entire State of Colorado is in attainment for PM10.

EPA uses a national network of monitoring sites to measure ambient PM10 concentrations. Sites in Colorado have been used to measure PM10 for at least one year, between 1990–2006. Forty of these sites were in operation in 2007. There are a cluster of sites on the Pike National Forest's northern boundary, primarily located in the Denver area. There are also sites in Douglas, El Paso, Teller, Fremont, and Alamosa counties.

2.3.4. Sulfur dioxide

Sulfur dioxide ($SO_{2)}$ belongs to the family of sulfur oxide gases (SOx). SOx gases are formed when fuel containing sulfur, such as coal and oil, is burned, or when metals are extracted from ore. SO_2 dissolves in water vapor to form acid, and interacts with other gases and particles in the air to form secondary products. Over 65% of SO_2 released to the air comes from electric utilities, especially those that burn coal. Other sources of SO_2 are industrial facilities that derive their products from raw materials like metallic ore, coal, and crude oil, or that burn coal or oil to produce process heat and oil and gas well flaring.

The entire State of Colorado is in attainment for SO_2.

EPA uses a national network of monitoring sites to measure ambient SO_2 concentrations. A number of sites in Colorado have been used to measure SO_2 for at least one year, between 1990–2006. Of these sites, two were in operation in 2007, both located in the Denver area. Though neither site that currently monitors SO_2 is located within the PSICC, some that have collected historic data are located adjacent to the PSICC.

2.3.5. Carbon monoxide

Carbon monoxide (CO) is a colorless, odorless gas formed from incomplete combustion. Motor vehicle exhaust contributes about 56% of nationwide CO emissions. Non-road engines and vehicles (such as construction equipment) contribute about 22% of nationwide CO emissions. Other sources of CO emissions include industrial processes (such as metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent, trapping air pollution near the ground beneath a layer of warm air.

The entire State of Colorado is in attainment for CO. As reported by EPA, trends in El Paso County show CO levels well below federal standards. Similar conditions exist around Denver.

A number of sites in Colorado have been used to measure CO for at least one year, between 1990-2006. Of these sites, ten were in operation in 2007. A cluster of sites borders the Pike National Forest, primarily in the Denver area. Sites are also located in El Paso County.

2.3.6. Prescribed fires

Any person or entity seeking to conduct a prescribed fire on the Forests must obtain a permit from the Colorado Air Pollution Control Division (APCD) of the Colorado Department of Public

Health and Environment (CDPHE). Permits are required for planned ignition (human ignited) or unplanned ignition (lightning ignited) fires.

The wildland fire smoke management and permitting program is implemented under the requirements of Colorado Air Quality Commission Regulation 9, "Open Burning, Prescribed Fire, and Permitting" (5 CCR 1001-11). This regulation provides requirements for permitting, reporting of activity, and collection of fees to cover the cost of the smoke management program. In addition, the State of Colorado requires permit applicants to submit Simple Approach Smoke Estimation Model (SASEM) outputs. SASEM is a conservative screening model that predicts PM10 emissions, ground level concentrations, and visibility reduction based on simple terrain and general vegetation types.

The APCD permit application and reporting forms provide the information necessary to generate an emissions inventory for prescribed fires. Smoke from prescribed fire contains a complex mixture of carbon, tars, liquids, various gases and particles. The fuel loading, fuel consumption, fuel moisture, burning method, and fuel type influence the air pollutant emissions. This emissions inventory is only an estimate of the emissions from fires. To develop an emissions inventory, the land managers report the most accurate burn-specific information available. In 2006, 57 burn permits were issued to the Forests. There were 25 actual burns: four broadcast burns (1,155 acres) and 21 pile burns (1.96 million ft^3 of material). Emissions estimated by the APCD for 2004–2006 are shown in Table 2.

Table 2. Estimated emissions for prescribed fires (tons)

Year	Acres burned	Piles burned (ft^3)	PM10	VOC	NOx	NMHC[2]	CO
2006	1,155	1,956,664	182	52	9	94	1,790
2007	8,399	2,134,043	363	190	30	105	3,370
2008	9,551	5,049,800	539	212	20	243	5,046

Unplanned ignition prescribed fire, also known as "wildland fire use," is the management of naturally ignited fires to achieve resource benefits where fire is a major component of the ecosystem. Allowing fire to play its natural role where private property and social values can be protected can enhance many natural resource values. Land managers are working on fire management plans that include wildland fire use as one of the tools available to meet resource objectives in the wilderness areas of the PSICC.

2.3.7. Acid deposition

Acid deposition is the result of gaseous emissions of sulfur dioxide (SO_2) and nitrogen oxides (NOx) that undergo complex reactions in the atmosphere resulting in the formation of sulfuric and nitric acid, respectively. These compounds can be deposited on the ground or into water bodies resulting in fertilization and acidification of soils and waters. The major source of sulfur dioxide is the burning of fossil fuels such as coal, fuel oil and diesel. The predominant sources

[2] NMHC = non-methane hydrocarbons

of nitrogen oxides are automobile exhaust and industrial emissions.

Increased nitrate concentrations, from urban, agricultural, and industrial pollution sources, have been measured in tundra ecosystems along the Front Range in the late 20th century. This is causing significant impacts to tundra communities as well as alpine aquatic communities. As a result, the biogeochemistry of alpine ecosystems is now outside the historic range of variability. Further damage from nitrogen could lead to significant effects of episodic and chronic acidification. If acidification from air pollution is pronounced and chronic, the long-term effects could be lethal to aquatic life, including some fish species, as well as vegetation.

High altitude lakes and ponds in Colorado tend to be very sensitive to acid deposition as they are poorly buffered. Acids accumulate in the snow pack over the winter and are released in the first 10–20% of snowmelt in a phenomenon known as the acid pulse. Some species of fish, salamanders and other aquatic life that are breeding around the pulse time may be affected. To determine relationships between pollution, air quality, and ecosystem impacts, the Forest Service Air Program has been monitoring lakes since the early 1980s, and continues to monitor lakes that appear to be the most sensitive to acid deposition. One parameter of interest is the acid-neutralizing capacity (ANC), which provides an indicator of the lake's ability to buffer acidic deposition whereby lower values indicate less buffering capacity.

As part of this Forest Service Air Program, five lakes in the Mount Evans Wilderness have been monitored for sensitivity to acidic deposition and long term trends in surface lake chemistry. These lakes include Abyss, Frozen, Upper Middle Bear Track, North, and South. Trends in ANC from lake-outlet samples are shown in Figures 2–6.

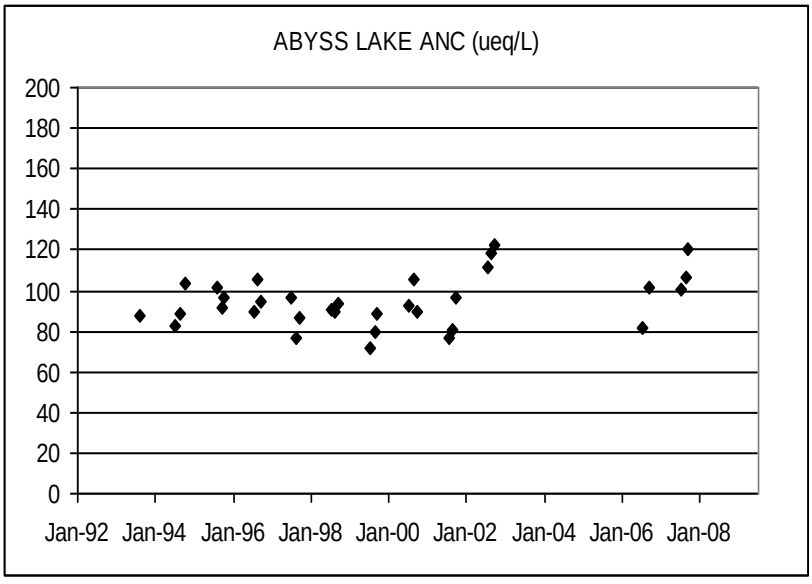

Figure 2. Abyss Lake ANC micro-equivalents per liter (µeq/L)

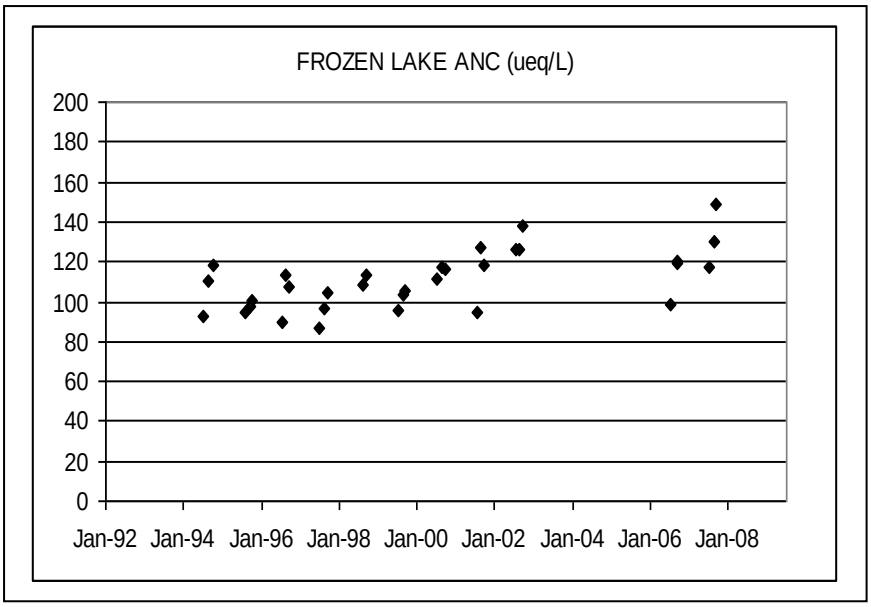

Figure 3. Frozen Lake ANC (µeq/L)

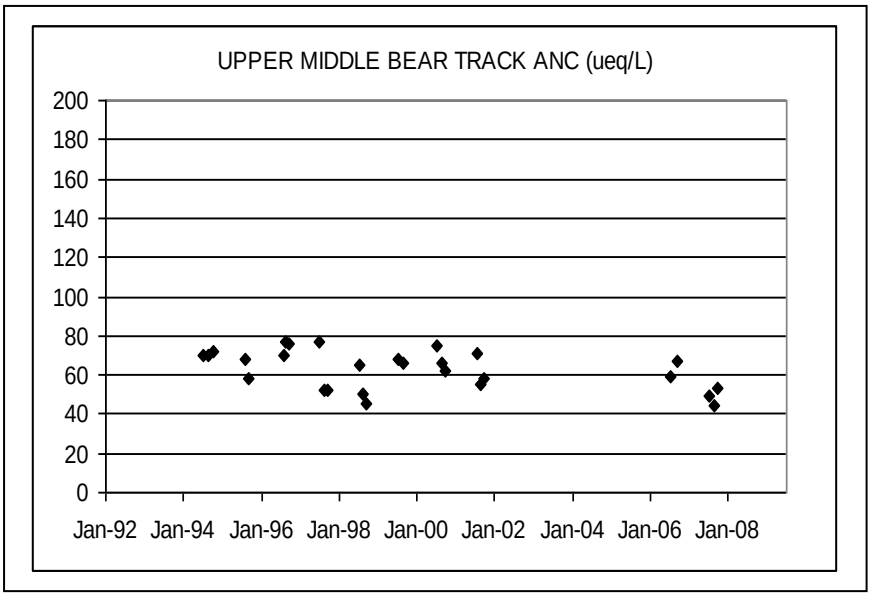

Figure 4. Upper Middle Bear Track Lake ANC (µeq/L)

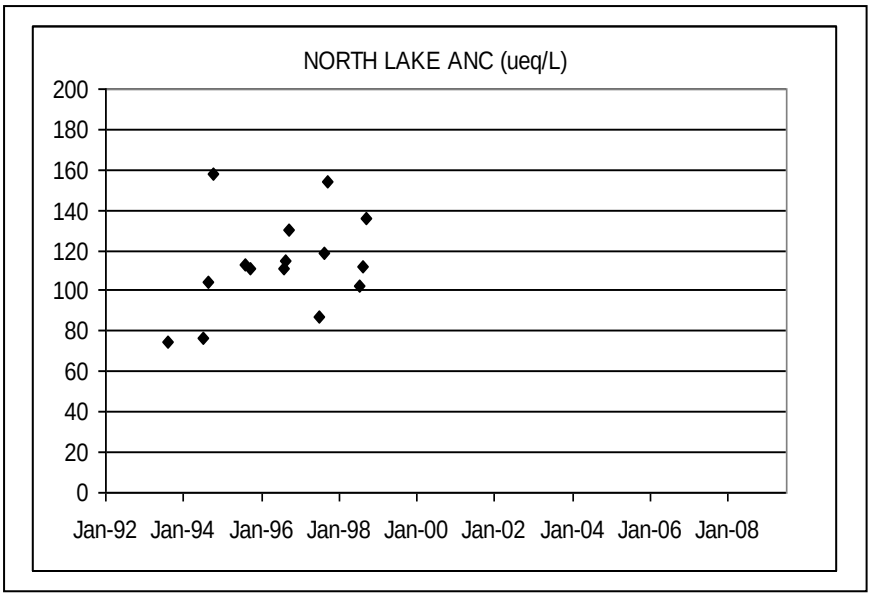

Figure 5. North Lake ANC (µeq/L)

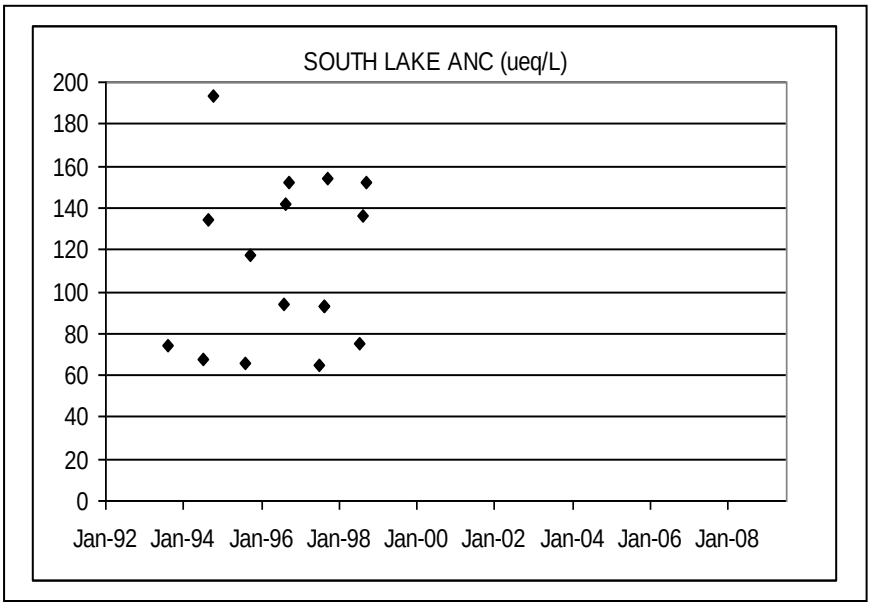

Figure 6. South Lake ANC (µeq/L)

The tenth-percentile value for Abyss, Frozen, Upper Middle Bear Track, North, and South lakes are shown in Table 3. The tenth-percentile value is often reported because it represents lake conditions when the lake is most sensitive to acidic deposition.

Table 3. Tenth-percentile ANC for lakes in Mount Evans Wilderness

Lake	10th percentile ANC (µeq/L)	Number of samples
Abyss	79.5	33
Frozen	94.2	32
Upper Middle Bear Track	50.1	27
North	80.9	15
South	67.0	16

It is difficult to draw substantive conclusions from the above ANC trend data because the measurements have not been corrected for hydrologic activity such as variations in precipitation or snowmelt runoff. However, these lakes meet the threshold for susceptibility to acidification as defined in a study conducted by Musselman and Slauson (2004). They considered high-elevation lakes "susceptible" to acidification if ANC was less than or equal to 200 micro-equivalents per liter (µeq/l) Samples from the five lakes presented above generally fall well below this threshold, with tenth-percentile values all below 100 µeq/l.

The study by Musselman and Slauson (2004) examined data from lakes throughout Colorado. They analyzed data from alpine and sub-alpine lakes (above 3000 meter elevation) based upon sampling conducted in 1995. Sampling locations in the Forests included four wilderness areas: Mount Evans, Sangre de Cristo, Holy Cross, and Collegiate Peaks. All seven lakes sampled in the Mount Evans Wilderness were considered susceptible to acidification. Twelve lakes, or 27% of lakes sampled in the Sangre de Cristo Wilderness were considered susceptible to acidification. Seven lakes, or 70% of lakes sampled in the Holy Cross Wilderness were also considered susceptible to acidification. Both lakes sampled in the Collegiate Peaks Wilderness were considered susceptible to acidification. Overall, 70% of the Colorado lakes were considered sensitive to acidification and 15% extremely sensitive.

The results from the Musselman study indicate the sensitivity of high elevation wilderness aquatic ecosystems in all regions of Colorado to acidification and nitrogen deposition. Most high elevation Rocky Mountain catchments are nitrogen limited, so increasing available nitrogen via atmospheric deposition of air pollution would result in increased growth and production of biomass. However, if organisms are unable to use all available nitrogen, it is exported, chiefly as nitrate, in surface waters to downstream terrestrial ecosystems.

Nationally, acid deposition is measured through a network of precipitation chemistry monitoring sites administered under the National Atmospheric Deposition Program / National Trends Network (NADP/NTN) The NADP/NTN network consists of monitoring sites located throughout the country which provide historical data on precipitation chemistry. The program began with 22 monitoring sites in 1978 and has grown to over 250 sites across the United States, Alaska, Puerto Rico, and the Virgin Islands. In Colorado, nineteen NADP/NTN sites are in operation, some since the late 70s and early 80s, including a station at the Manitou Experimental Forest headquarters on the Pikes Peak Ranger District of the PSICC.

Concentrations of nitrogen compounds appear to be increasing at Manitou Experimental Forest as shown in Figures 7 and 8.

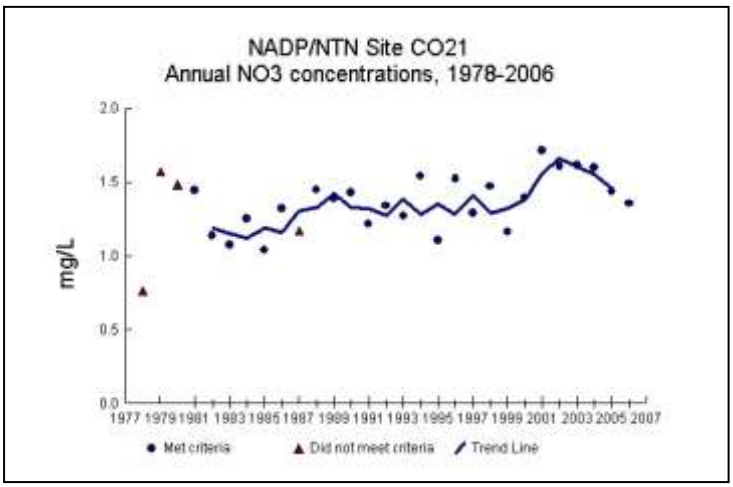

Figure 7. NO3 concentrations Manitou Experimental Forest monitoring station

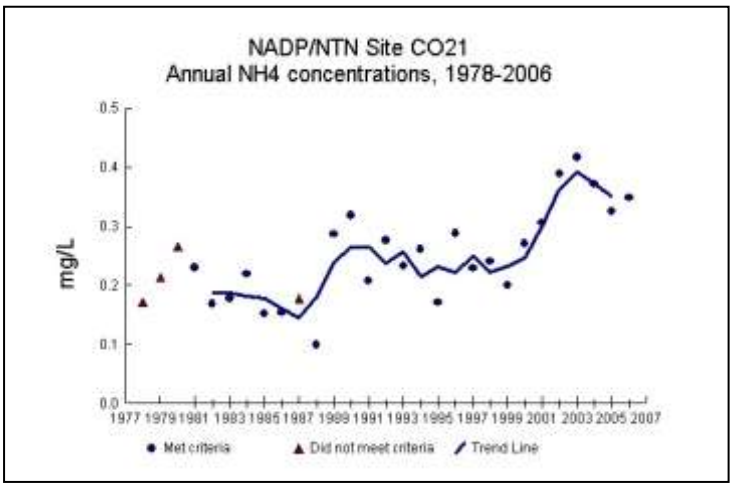

Figure 8. NH4 concentrations Manitou Experimental Forest monitoring station

Projections between now and 2030 suggest a 50-75% reduction in national nitrogen oxides as a result of declining nitrogen oxide emissions tied to recent federal rules requiring cleaner-burning conventional and diesel vehicles (40 CFR 80, 85, and 86). These reductions may significantly reduce deposition in sensitive regions, as vehicle exhaust accounts for nearly half of the nitrogen emissions in the South Platte Basin. At the same time, the federal regulations calling for cuts in haze at national parks—another form of pollution linked to nitrogen compounds—will likely force more emission reductions at some Front Range power plants and factories. In addition, the National Park Service is proposing protective limits on nitrogen deposition; 1.5 kilograms per hectare (100 acres) per year. This limit is half, or less, of current fallout levels, which range from 3 to 4 kilograms per hectar. The limit would establish the nation's first critical load of a pollutant to protect a national park environment, and efforts to achieve the standard would likely have air quality benefits throughout Colorado.

2.3.8. Visibility

Visibility is a measure of how clearly distant objects can be seen. The Clean Air Act identifies visibility as an "Air Quality Related Value" (AQRV), meaning visibility is a resource that may be adversely impacted by air quality changes in Class I or Class II areas. Other AQRVs include any specific scenic, cultural, physical, geologic, biological, ecological, or recreational resource identified by the Federal Land Manager (FLM) for a particular area.

Impairment to visibility is commonly called "haze", which results when particles in the air scatter and absorb light. As airborne pollutants increase, more absorption and scattering of light occurs, thereby reducing the clarity and color of distant objects. Some types of particles such as sulfates are more efficient at scattering light, particularly during humid conditions. Impairment to visibility can also occur from specific point source such as a coherent plume that does not dissipate into a general haze.

Section 169(A) of the Clean Air Act requires the Environmental Protection Agency (EPA) to create regulations to make progress towards the national goal of the "prevention of any future, and the remedying of any existing impairment of visibility in mandatory Class I Federal areas were impairment results from man-made air pollution." To aid the implementation of this legislation, the Interagency Monitoring of Protected Visual Environments (IMPROVE) program was implemented in 1985. This program launched an extensive long term monitoring program to establish the current visibility conditions, track changes in visibility, and determine mechanisms for visibility impairment. In 1999, the EPA announced the Regional Haze Rule to improve air quality in Class I Federal areas. The rule requires the states, in coordination with the Environmental Protection Agency, the National Park Service, U.S. Fish and Wildlife Service, the Forest Service, and other interested parties, to develop and implement air quality protection plans to reduce the pollution that causes visibility impairment.

There are no Class I areas on the Forests, so visibility monitoring is not a mandate in this area. However, IMPROVE monitors at adjacent Class I areas provide some indication of trends in Forests. These locations are shown in Table 4.

Table 4. IMPROVE visibility monitoring sites correlated with the Forests' wilderness areas

Monitoring site	Corresponding wilderness area for data comparison
Rocky Mountain National Park	Lost Creek Mount Evans
Great Sand Dunes National Park	Greenhorn Mountain Sangre de Cristo Spanish Peaks
White River National Forest	Buffalo Peaks Collegiate Peaks Holy Cross Mount Massive

Conditions at these IMPROVE locations are shown in Figures 9, 10, and 11. These figures were obtained from the Visibility Information Exchange Web System (VIEWS) an online repository of air quality data supported by the U.S. EPA and Colorado State University. The graphs display the annual average standard visual range (SVR), a metric that represents the distance at which a large dark target is visible under uniform lighting conditions. Higher visual range indicates less hazy air. At the Rocky Mountain National Park and Great Sand Dunes National Park, the average annual visibility has remained relatively consistent, ranging from about 160 to 180 kilometers (km). At the White River National Forest, comparable historic data are not available; however, more recent data indicate visibility above 210 km.

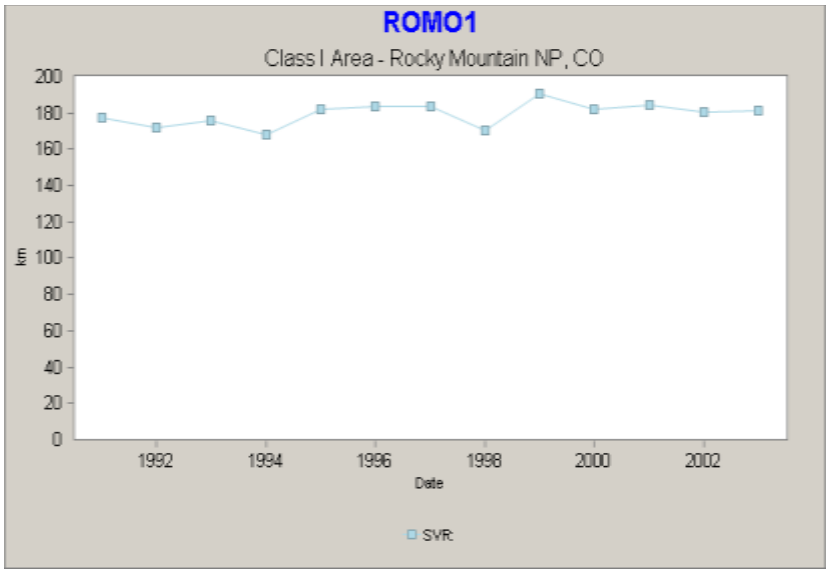

Figure 9. Visibility Trends at Rocky Mountain National Park (representative of the Mount Evans and Lost Creek wilderness areas)

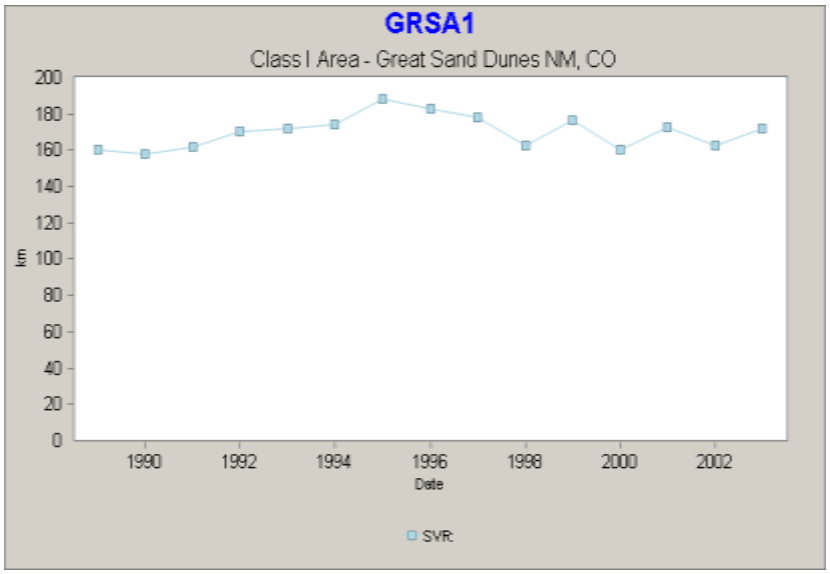

Figure 10. Visibility trends at Great Sand Dunes National Park (representative of the Sangre de Cristo, Spanish Peaks and Greenhorn Mountain wilderness areas)

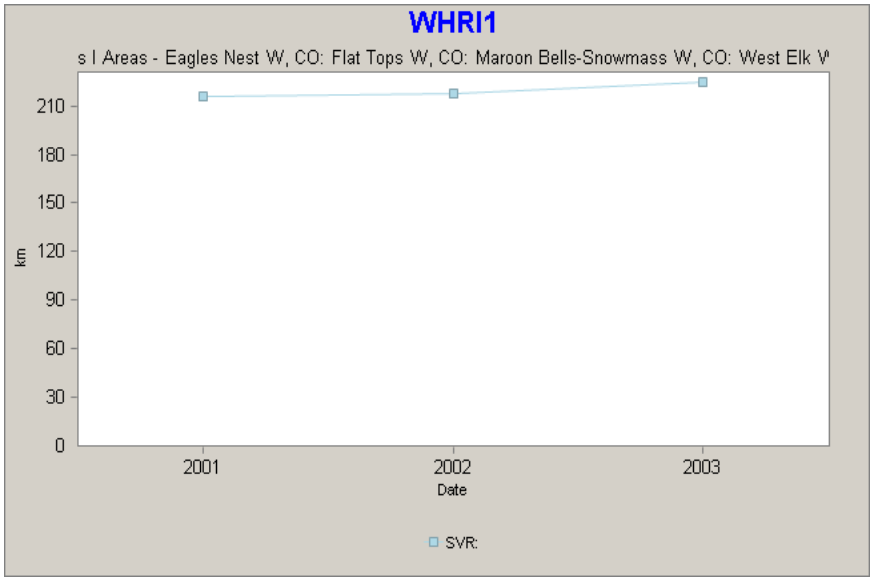

Figure 11. Visibility trends at White River National Forest (representative of the Holy Cross, Mount Massive, Buffalo Peaks, and Collegiate Peaks wilderness areas)

2.3.9. Light pollution

Light pollution from urban areas is affecting the night sky viewing experience in the Mount Evans and the Lost Creek wilderness areas. Radiant light from the Denver metropolitan area has elevated the sky brightness by as much as 34% over the natural background for parts of these wilderness areas (Albers and Duriscoe 2001).

2.4. Mineral Resources

2.4.1. Energy Minerals

The Cimarron and Comanche National Grasslands (Grasslands) support the majority of the oil and gas leasing, exploration, development, and production activities on the PSICC. However, there has been renewed leasing interest along the Front Range of the Pike National Forest and in the Spanish Peaks area of the San Isabel National Forest. The Pikes Peak District now has areas under lease along the Rampart Range northwest of Colorado Springs and has a complete Application for Permit to Drill (APD) from Dyad Corporation. The South Park District has a proposal to lease an area southeast of the town of Jefferson, Colorado. The San Carlos District has a proposal to lease an area southwest of the town of La Veta, Colorado, and another southeast of the town of Cuchara, Colorado. Extensive seismic and other geophysical and geochemical exploration has taken place over the years in the Rampart Range and Wet Mountains.

2.4.2. Locatable Minerals

The South Park District of the Pike National Forest supports the majority of mining and exploration activities; some locatable mining also takes place in the Leadville and Salida Districts of the San Isabel National Forest and the South Platte District of the Pike National Forest. The majority of the small commercial operations mine amazonite and smokey quartz crystals, with some gold placer mining taking place on the Leadville District. No major or moderate exploration, development, or production operations have taken place. Recreational mining activities such as panning, dredging, and rock hounding are on a slight increase. Over the past couple of years efforts (including criminal litigation in two cases) have been taken to bring several unauthorized operations on the South Park District into compliance with regulation and policy. These efforts have been successful in that the operators currently have approved plans of operations in place.

3. Biological Components

3.1. Wildlife, Fisheries, and Rare Plant Resources

3.1.1. Accomplishments of interagency objectives

PSICC personnel meet regularly with the Bureau of Land Management (BLM), U.S. Fish and Wildlife Service (USFWS), CDOW, Kansas Department of Wildlife and Parks (KDWP), and various other partners regarding wildlife objectives and opportunities for projects that will help achieve shared objectives. Topics have focused on the lesser prairie chicken, big game species, and fisheries with the state agencies, livestock grazing, timber and travel management with the BLM, and threatened and endangered (T&E) species with the USFWS. CDOW's Habitat Partnership Program includes representatives from CDOW, the Forest Service, the BLM, private landowners, and hunters with the aim of addressing big game animal damage issues on private lands intermixed with state and federal ownerships. The PSICC has established partnerships with state universities and species advocacy groups such as Trout Unlimited, Ducks Unlimited, Quail Unlimited, the Rocky Mountain Elk Foundation, Mule Deer Foundation, Rocky Mountain Bighorn Society, and the National Wild Turkey Federation for research and habitat enhancement projects. The PSICC has developed a 5-Year Action Plan (2005–2010) for wildlife, fish and rare plants that was reviewed and co-signed by state agency district biologists. Program priorities for projects and funding follow this action plan, which is posted on the Region 2 Wildlife, Fisheries, and Rare Plants (WFRP) website.

3.1.2. Threatened and endangered species

Emphasis continues to focus on habitat improvement projects and completing inventories to establish baseline species population and distribution information. The T&E habitat improvement efforts have primarily involved work necessary to support the reintroduction of the greenback cutthroat trout and improve Pawnee montane skipper (butterfly) habitat. Prescribed burning, mechanical treatments and noxious weed treatments have been used extensively to improve ecosystem structure and composition for both Forest and Grassland sensitive species (such as mountain plover, bighorn sheep, black-tailed prairie dog, lesser prairie chicken, and northern goshawk). Partnerships are a critical part of achieving these accomplishments. A

summary of TES monitoring efforts is provided below.

Threatened & Endangered

Mexican Spotted Owl (MSO) – MSO surveys were conducted jointly by the Forest Service and the Bureau of Land Management (BLM). Surveys were completed at fourteen sites on the San Carlos Ranger District, one site on the Salida Ranger District, and eight sites on BLM land. Seven MSO were detected, all on BLM land. Additional activity included the training of five district personnel in the approved MSO survey protocol.

Canada Lynx – No survey activity in 2009; Continue coordination with CDOW.

Greenback Cutthroat Trout – No survey activity in 2009. Efforts to monitor habitat in Severy and Bear creek will begin in 2010. Dave Winters, Regional Aquatic Ecology Program Leader, serves as the Regional contact for the Greenback Recovery Team.

3.1.3. Monitoring of Regional Forester Sensitive species

Bighorn Sheep – The Forest assisted CDOW with an inventory of bighorn sheep, including counts of adults and young. Abundance of sheep was determined in the designated areas and will be used to determine population trends.

Osprey – Known osprey nest sites were monitored on the Leadville RD. Nests were visited numerous times throughout nesting season to determine presence and reproduction success. Two nests were active this summer.

Swift Fox, Burrowing Owl, and Mountain Plover – On the Cimarron National Grassland surveys were conducted in active prairie dog colonies to determine presence of burrowing owls and swift fox. The active prairie dog colonies were mapped to monitor trends in acres of habitat occupied. On the Comanche mountain plover surveys were conducted in areas of past prescribed burns and in prairie dog towns. Presence and absence of Burrowing owl, Swift fox and Long-billed curlew in the vicinity of the prairie dog towns and burn areas were also recorded. No Mountain plover were seen. Burrowing owls were present within the burn and in all six of the prairie dog colonies. One swift fox was seen in the Reader Lake colony and four curlews were found in the Mountain Plover colony.

Ferruginous Hawk, Swainson's Hawk, and Loggerhead Shrike -- Raptor and shrike nesting was monitored on the Comanche NG. The 2009 survey documented 16 Ferruginous hawk, 10 Swainson' s hawk, 7 Red-tailed hawk, and 6 Loggerhead shrike on the Timpas Unit. Forty seven nests were located, 14 of the 47 were active; 3 were Ferruginous hawk nests with a total of 5 young; 8 Swainson's hawk nests were located with 3 eggs counted; 1 Red-tailed hawk nest with 3 young and 3 Loggerhead shrike nests with 3 young and 5 eggs were located.

On the Carrizo Unit there were 12 active Ferruginous Hawk nests in the study area in 2009, including 6 on federal land. Breeding success was similar to previous years, with over 2.5 young produced per successful nest and 11 of the 12 pairs successfully hatching young. Loggerhead

Shrikes had a very poor year with only 2 active nest sites located (one on federal land and one along a roadway on private land). One nest contained 2 eggs and the other nest contained 4 eggs. Many of the historical nest sites, where shrikes had nested multiple times in previous years, were apparently not used in 2009

Boreal Toad – the Leadville RD conducted boreal toad surveys using the "Boreal Toad Conservation Plan and Agreement" survey protocols for species management were used during each site visit. All data collected were provided to the Colorado Natural Heritage Program for analysis. Historical sites were determined to be active or inactive after finding presence of a species. New sites were also evaluated for potential breeding habitat and were labeled as good or inadequate to facilitate subsequent surveys.

Three thousand acres were surveyed at Windy Point Pikes Peak Alpine Lab to identify the presence or absence of two rare plant species: *Oreoxilis humilis* and American yellow lady's-slipper. The project was a partnership with Denver Botanic Gardens and the Colorado Natural Heritage Program.

White-tailed ptarmigan -- White-tailed ptarmigan surveys were conducted across the winter use area on the South Platte RD. In 2008 and 2009 the number of ptarmigan recorded were low compared to the results obtained during the 2003-2006 winters. In 2008, 42 birds were counted and 69 birds in 2009. The number of ptarmigan located in 10 surveys conducted from 2003 to 2006 ranged from 53 to 104, with the exception of 18 birds being recorded during our first survey in December 2003.

Porter's False Needlegrass (*Ptilagrostis porter*) -- An annual inventory of populations was conducted within three established long-term monitoring plots on the South Park RD. The intent of this monitoring was to determine the stability of this species within the plots. In addition, sites were inspected for signs of grazing by cattle or wildlife, and for potential impacts from roads or mining.

Black-tailed Prairie Dog – The locations of active black-tailed prairie dog colonies have been monitored on the Grasslands using Global Positioning Satellite (GPS) technology since 1999. In 2009, the Forest Service personnel on both Grasslands continued with the survey. The following summarizes the results of the 2009 survey, comparing trends in black-tailed prairie dog colony acreage on the Cimarron and two separate units of the Comanche, and displays the effects of plague beginning in 2005 on the total black-tailed prairie dog distribution from 1999–2009.

Comanche National Grassland

5,115 acres of active prairie dog colonies were mapped in 2009, revealing a considerable increase from 2007 (3554 acres) and 2008 (2542 acres; Table 1).

Table 5. Acres of active black-tailed prairie dog colonies measured using GPS surveys on the Comanche National Grassland 1995–2008

Year	Carrizo Unit (acres)	Timpas Unit (acres)	Comanche total (acres)
1995	5,728	551	6,279
1999	1,894	N/A	N/A
2001	3,851	362	4,213
2002	5,127	575	5,702
2003	6,064	556	6,620
2004	11,592	536	12,128
2005	14,387	508	14,894
2006	5,786	988	6,774
2007	3,554	1,073	4,627
2008	2,542	1,093	3,635
2009	--	--	5,115

Cimarron National Grassland

A total of 1,337 acres of active black-tailed prairie dog colonies were mapped on the Cimarron in 2008 (Table 2).

Table 6. Acres of active black-tailed prairie dog colonies on the Cimarron National Grassland, 1989–2009

Year	Cimarron active colony acres	Net annual change in active colony acreage measures (%)
1989	750	
1992	1,082	
1997	1,246	
1998	1,298	
1999	1,697	
2001	2,439	
2002	3,321	36.2
2003	4,008	20.7
2004	5,634	40.6
2005	5,793	2.8
2006	5,660	-2.3
2007	2,681	-47.4
2008	1,337	-49.8
2009	2,154	62

Results from the Cimarron from 1989–2009 suggest a steady, long-term increase in colony acreage with a sudden drop in 2007, likely due to plague. Plague was detected on the Cimarron in 1999 and 2003, but colony die-off was isolated in those years and did not spread to other colonies. Beginning in 2006, the plague has had a much greater impact.

Lesser Prairie Chicken – Lek surveys on the Cimarron and Comanche National Grassland were conducted in 2009. On the Cimarron National Grassland the high count was 66, which is a

decline from 2008. On the Comanche National Grassland the high count was 42, which was an increase from 2008.

3.1.4. Monitoring of Management indicator species

A decision notice for a Forest Plan amendment was published August 8, 2005, modifying the current management indicator species (MIS) list. This review indicated the need to reduce the 1984 MIS list with related Forest and Grassland major management activities in associated ecotypes (called management indicator groups).

The completed MIS Amendment Decision Notice and EA are on file at the PSICC Supervisor's Office in Pueblo, Colorado, and available on the PSICC Web site at http://www.fs.fed.us/r2/psicc/projects/.

A summary of MIS monitoring for 2009 is provided below.

Abert's Squirrel – Thirty three 60-acre grids have been established across the Forest in randomly selected polygons representing a range of habitat conditions. Each grid is monitored during the late winter/early spring to detect feeding sign occurrence. A Master's student conducted a study to determine the effect of forest thinning on Abert's squirrel density. The study showed that untreated areas have significantly more feeding sign and that Abert's squirrel densities appear to be higher in untreated areas. Since 2006 treated areas have contained less Abert's sign than untreated areas. Potential widespread impacts to Abert's habitat continue to be epidemic mountain pine beetle infestations and uncharacteristically large and severe wildfires in ponderosa pine.

Brook trout – some monitoring of brook trout was conducted in 2009. Data are on file at the Salida District Office.

Greenback cutthroat trout – no new monitoring was conducted in 2009. Monitoring protocols for two populations, Severy and Bear Creek, have been developed and will be implemented in 2010-2011.

Rocky Mountain Elk – Elk was selected as an MIS because of the public's interest in hunting and viewing. Elk also have specific habitat management guidelines in the 1984 Plan. The CDOW annually monitors elk at the data analysis unit (DAU) scale to assess changes in population trends. A DAU is an area an elk population uses throughout the year and is comprised of one or more game management units (GMU). Statewide elk population trends and current objectives are illustrated below (Figure 12). All DAUs that contain a portion of the PSICC are above the CDOW's defined long term objective. The PSICC is an important area socially for hunting and view elk, but contains a relatively low elk population compared with the remainder of Colorado. Approximately 35,000 elk (12% of the statewide population) are located in DAUs which contain a portion of the PSICC (all ownerships). Factors that directly affect elk activity and population size include: disturbance, recreation, roads, hazardous fuels reduction, fire suppression, weather, and forest/range management. The 1984 Plan provides some specific treatment guidance in big game management areas (MA 5B) that is unique from other habitat

prescriptions.

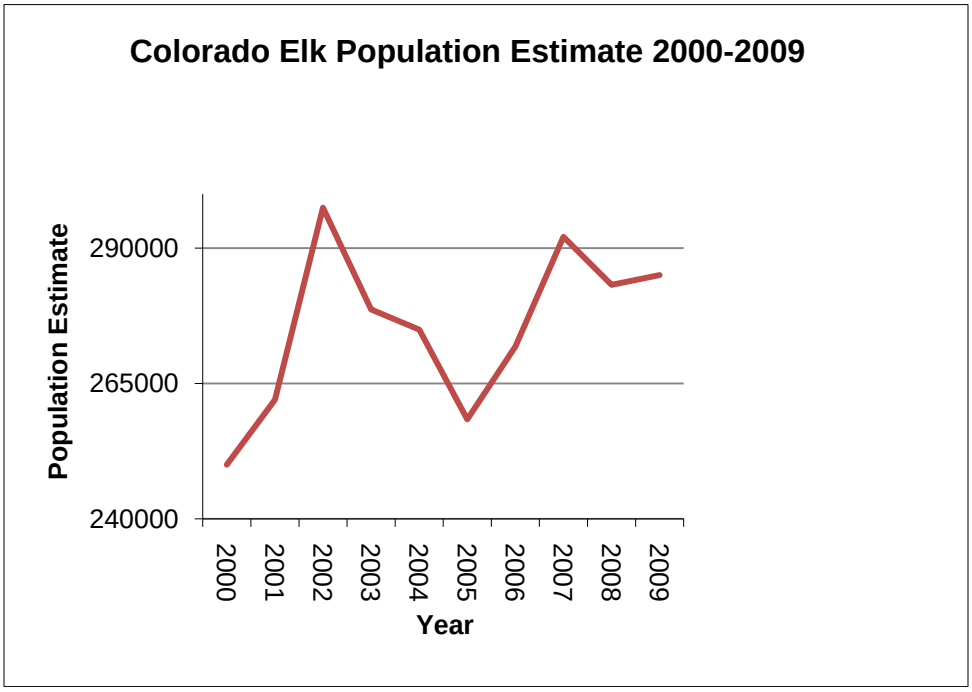

Figure 12. Colorado Elk Population Estimate 200-2009

3.2. Riparian and Aquatic Habitat Modification and Enhancement on the PSICC

Impacts to riparian and aquatic ecosystems are caused by a number of human-related activities, with sedimentation from erosion causing the most extensive amount of impact to riparian areas. Because sedimentation can change stream channel physiology, increased water temperatures, reduction in aquatic habitat and other indirect effects, in-stream channel and riparian re-establishment projects have focused on restoring the physical processes needed to sustain habitat for riparian and aquatic-dependent species.

Most human-induced erosion is related to ground-disturbing activities, such as road and trail use, construction and maintenance, livestock grazing, mining, and timber harvest. Other direct or indirect consequences from human-related activities that currently effect riparian and aquatic ecosystems include removal of and/or presence of nonnative invasive riparian vegetation with associated increases in water temperatures, mining effluent releases, and stream flow modifications (reduced flows). Recent adaptations of traditional habitat improvement methods have led to an increase in the effectiveness of stream enhancement projects. More emphasis is placed on treating root causes of dysfunctions (disturbance and structural stability) rather than the symptoms (total pools, sedimentation).

3.3. Range Condition and Use

3.5. Range Condition and Use

Range Specialists utilize a number of techniques to monitor long term range condition. Factors that influence range condition include species composition, basal and foliar cover, percentage of bare ground, and production. Monitoring throughout the PSICC has shown an improvement in range condition as Permittee's have responded to increased demands in management practices. A concerted effort has been made to improve range infrastructure. In 2009 permittees have shown an increased interest in monitoring, herding, salting and expanding water distribution systems.

3.5.1. Allotment management planning

NEPA analysis was conducted for the McQuaid and San Carlos range allotment management plans. This analysis included eight allotments for the San Carlos District and one for the South Park District. Both decision notices will be signed in 2010.

3.5.2. Acres administered to standard

The Districts and Forest Rangeland Management personnel gave added emphasis to administering the grazing that occurred on the PSICC in 2009. The drought, from the first half of the decade, was intense and wide spread. When needed, changes in management were implemented to correct a situation before it resulted in resource problems. This careful planning and management, through the drought, was evident as plants responded to improving moisture conditions in 2006 through 2009. In addition to management, many infrastructure improvements were accomplished, allowing for better flexibility and control of livestock.

609,513 acres of rangeland were administered to standard in 2009. These acres are being monitored by a Rangeland Management Specialist, who evaluates the grazing use by authorized livestock. Following evaluation the Rangeland Management Specialist implements the required direction found in the LRMP, AMP, term grazing permits, grazing agreements, biological opinions, and other documents developed to guide livestock grazing in order to improve or maintain the resource values of each allotment.

3.4. Forest Resources

3.4.1. Forest condition and use

The 1984 Plan established an allowable sale quantity of 37 million board-feet (mmbf) per year, with the intent that timber offer targets would gradually approach that level as more acres were put under management. In 1984, approximately 1,065,220 acres were considered tentatively suitable for commercial timber harvest. Much of the timber sold was used for fuel wood. In addition, the economics of harvesting timber on PSICC were such that, once the below-cost issue began affecting policy, funding for the commercial timber program was curtailed to a level well below Plan projections in the 1984 Plan. By FY94, the timber program had declined to historically low levels, with most of the volume harvested still being sold for fuel wood. The

timber volume offered since the 1984 Plan has been implemented is shown in Figure 13.

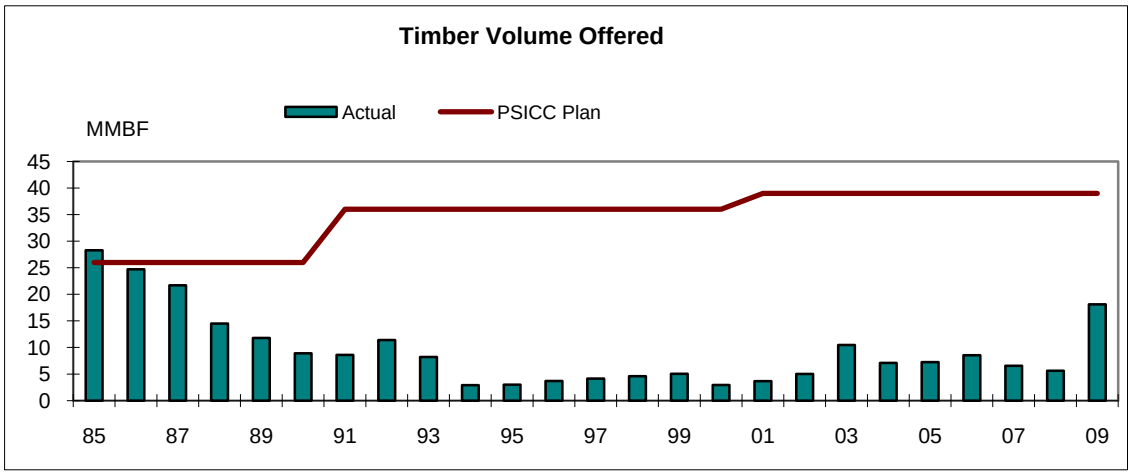

Figure 13. Timber volume offered

As shown in Figure 14, the treatment rate of forested acres by all types of projects designed to modify forested vegetation, has not kept pace with predictions. The Timber Harvest History table in Appendix A shows acres harvested and cutting method on the PSICC since 1987. The net effect is that the situation as described in the 1984 Plan has not substantially changed, except that most of the trees are about 25 years older.

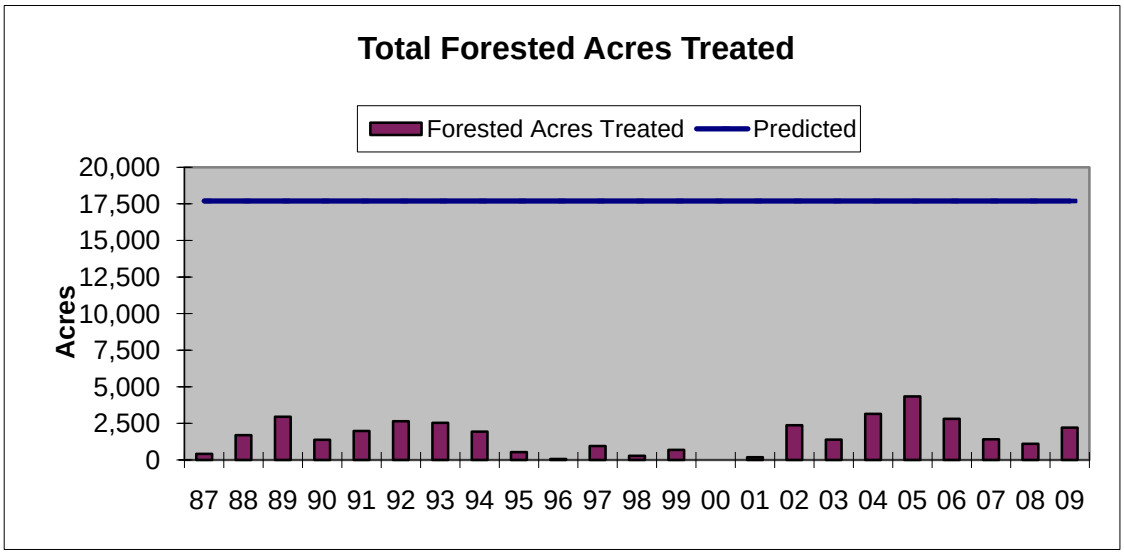

Figure 14. Total number of forested acres treated

Forest management on the PSICC has not kept pace with the growth rate of the trees. This unmanaged growth, coupled with recent drought conditions has accelerated insect and disease infestations, and has produced an ominous fuels build-up. A situation of increasing severity exists, particularly along the Front Range, where the Buffalo Creek, Hi Meadow, Hayman, and Mason Gulch fires occurred.

Steps are being taken to:

1. Build a new and active forest management program.
2. Seek possible markets for the types of smaller-sized wood products whose removal would best benefit forest health.
3. Use timber sales as a tool to achieve natural resource management goals.

This is discussed further in the Fuels Treatment section of this report.

3.4.2. Reforestation and timber stand improvement activities

These activities have been variable over time, as is shown in Figure 15 and Figure 16. Funds for these activities are obtained primarily from timber sale revenues.

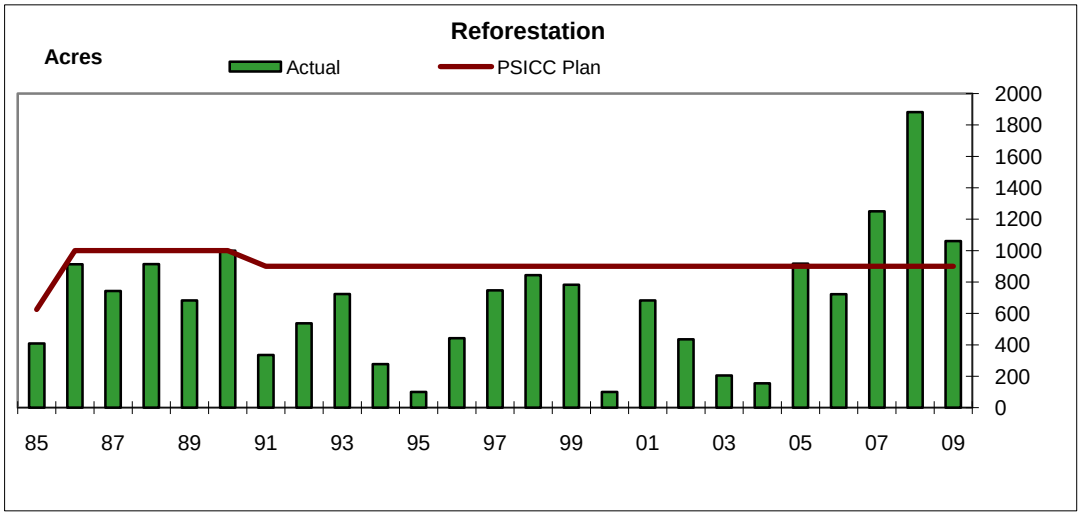

Figure 15. Acres of reforestation: Actual and PSICC Plan

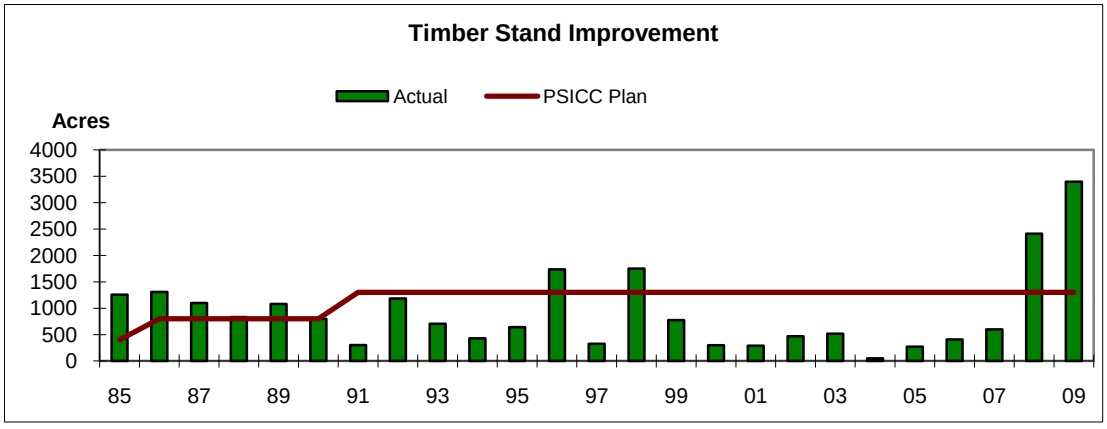

Figure 16. Acres of timber stand improvement: Actual and PSICC Plan

The reforestation increases, beginning in FY 1996, are due to the restoration efforts after the 1996 Buffalo Creek Fire and the large fires of 2002, including the Hayman fire that burned approximately 138,000 acres. These events created a tremendous reforestation need on the Pike

National Forest. Where the burning severity was moderate or high, the natural seed source has been lost for thousands of acres. To have a functioning ponderosa pine ecosystem in the future, seedlings need to be planted. Reforestation efforts following the Hayman fire started in 2003 with cone collection. In 2004, 100 acres were planted followed by 920 acres in 2005, 722 acres in 2006, 1250 acres in 2007, 931 acres in 2008, and 660 in 2009. As funding is received for cone collection, greenhouse expenses, and planting contracts, reforestation will continue in areas of the large burns. The National Arbor Day Foundation donated more than $412,000 toward reforestation in the Hayman fire burn area during the past seven years.

3.5. Fuels

3.5.1. Fuels treatment

A history of fire suppression, land use practices (such as widespread burning and logging in the late 1800s, heavy livestock grazing the late 1800s and early 1900s, and tree planting in the early 1900s) and climatic variation has, over the last century, altered fire regimes and associated fuel loading, landscape composition, structure, and function across the Forest. As a result, the number, size, and severity of wildland fires have departed significantly from those of historical conditions – sometimes with catastrophic consequences. These negative effects of certain land-use practices on land health and sustainability have been recognized in recent years.

Recent examples of increasing wildland fire size and uncharacteristic severity in Colorado include the 2000 fire season in the Pike and San Isabel National Forests in which over 24,000 acres burned and 59 structures were destroyed. The 2002 Hayman fire in Colorado burned approximately 138,000 acres and cost nearly $44.2 million to suppress. To date, the Hayman fire is the largest wildland fire in the state of Colorado.

Over the past year the PSICC has integrated two strategies into the hazardous fuels program. The first is the Front Range Fuels Treatment Strategy which emphasizes the need to identify, prioritize, and rapidly implement hazardous fuels treatment projects along Colorado's Front Range. This strategy focuses on a large-scale rapid assessment of the hazardous fuel conditions along the Front Range, enabling the identification of 300,000 acres on the Pike National Forest alone where treatment needs are of the greatest concern. The second is the reintroduction of Integrated Resource Management with a heavy emphasis on overall vegetation management to improve forest health, reduce wildfire risks to communities and the environment, and correct problems associated with long-term disruptions of natural fire cycles that have increased the risk of severe wildland fires to fire prone and fire dependent ecosystems (the PSICC treated 20,246 acres in 2006). This second strategy addresses the need to accelerate management of:

1. Hazardous fuel loadings.
2. Increasing insect infestation problems.
3. Reducing wildland fire impacts.
4. Protecting and restoring high value watersheds and wildlife habitats.
5. Enhancing ecosystem sustainability and the sustainability of communities in high hazard priority areas within the PSICC.

The current fire risk and beetle infestations on the PSICC are linked by a common factor of

overly dense forests which resulted from 100 years of fire suppression and the prolific growth of ponderosa pine and mixed conifer stands. Cycles of drought exacerbate the stress on overcrowded tree stands. An estimated 900,000 acres on the PSICC are overcrowded with dense stands of ponderosa pine, mixed conifer trees, and decadent growth from grass and shrub species. Along with a growing mix of homes situated within forested areas and the many high priority areas and communities at risk adjacent to or within the PSICC, we are faced with the dilemma of how to choose treatment areas and communities to work with. Although many communities and counties have demonstrated their support for fuels treatment, some have not yet done so or are at different stages of developing fire and fuels management plans and strategies. Meeting the objectives of the two strategies mentioned above and also of the Healthy Forest Restoration Act, the National Fire Plan, the Healthy Forest Initiative, and the 10-Year Comprehensive Strategy, requires a coordinated effort across landscapes to restore and maintain the health of fire prone ecosystems. Currently, 500,000 acres of high priority treatments areas have been identified throughout the PSICC.

3.5.2. Fuels management outlook for the future

The key to the PSICC's success in fuels management will be extensive collaboration with the public and local, county, state, and other federal agencies to support specific treatment areas and types, along with the application of Wyden Amendment authorities and the Good Neighbor Policy to conduct fuels treatment work across boundaries. In five years the 500,000 acres of high priority treatment areas is projected to increase to 575,000 acres, an estimate based on the rate of tree growth and increased insect infestation and disease. If the PSICC continues to accelerate treatment work by increasing the Hazardous Fuels and Vegetation Management Program, about 36% of these priority acres will be treated after five years, and 70% after ten years. Treating hazardous fuels and insect and disease infestations will help reduce the impacts of wildfires on communities and restore health to fire adapted ecosystems. Programs that focus on restoration of fire prone and fire dependent ecosystems and better integration of vegetation management, forest health, wildlife, range, watershed, and other available dollars will be more aggressively explored.

4. Social Components

4.1 Heritage Resources

4.1.1 Cultural Resources Compliance Surveys/Inventories and Recording Site

Inventories are conducted in areas where ground disturbing projects are planned; such inventories include on the ground searches for new cultural sites, recording these sites, and evaluation of previously recorded sites. In recent years, major inventories (in terms of total acres surveyed) have occurred on grazing allotments (primarily on the San Isabel National Forest) in support of allotment management planning, and for proposed large fuels reduction and vegetation management projects. To support the general effort of the unit to reduce hazardous fuels in vulnerable timber stands, much of the inventory effort in recent years including 2009 on Pike National Forest has focused on the Rampart Range and the vicinity of Tarryall Creek on the

South Park District. In 2009 cultural inventory efforts were focused in the Arkansas Hills northeast of Salida and in the vicinity of Poncha Pass southwest of Poncha Springs. Prescribed fire support surveys were also accomplished on Comanche National Grassland in southeast Colorado and on the Cimarron National Grasslands in southwest Kansas.

Non-project related surveys have continued in areas known to contain high densities of cultural resources. These multi-year efforts include Picket Wire Canyonlands (a special Management Area with an extremely high density of archaeological sites), the canyons north of the Cimarron River in extreme southeast Colorado, Guanella Pass west of Denver, and in the vicinity of the Buffalo Peaks south of Fairplay. The total acres inventoried and cultural sites evaluated were 9223 and 278 respectively for 2009. These totals have remained constant over recent reporting years. Figure 17 displays the acres surveyed annually back to 1986.

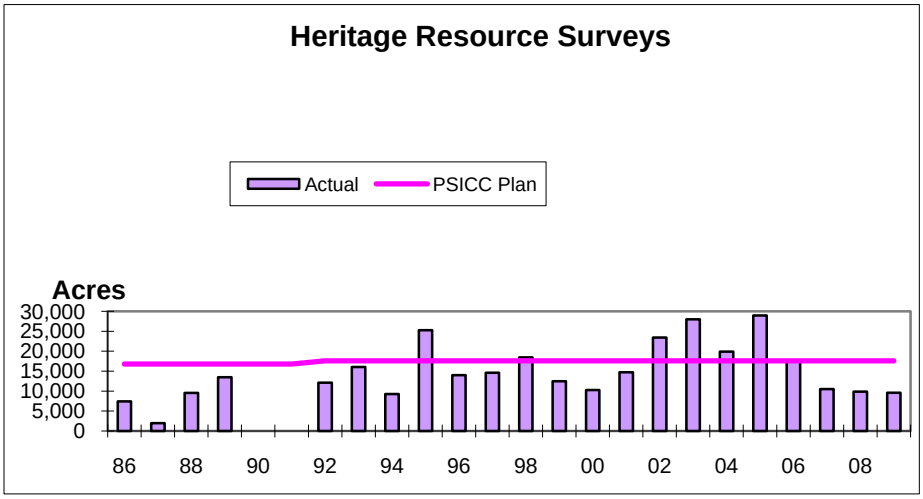

Figure 17. Heritage resource surveys conducted from 1986 through 2009

4.1.2. Interpretation, Protection, Public Outreach and Accomplishments.

4.1.2a Interpretive Efforts. Interpretive efforts on the Grasslands have continued to focus on the Santa Fe Trail, and canyon settings including the National Register listed Rourke Ranch, and the Colorado State listed Vogel Canyon vicinity. For the Forests, the focus has been on historic mining regions, railroad and homestead sites, primarily in the Chalk Creek, Clear Creek and Twin Lakes areas. In 2009, our internal program to develop interpretive media at historic rental cabins (a RecFeeDemo project) was continued.

4.1.2b Protection Efforts. Protection efforts in FY2009 were focused areas with known high densities of prehistoric sites and included Picket Wire Canyonlands, the Marshall Pass area and Squirrel Creek; a total of 136 cultural sites were inspected to assess changing conditions. Major historic property repair and restoration projects in 2009 included Rourke Ranch and Vogel Canyon on the Comanche National Grasslands and the Interlaken Resort Historic District on the San Isabel National Forest, and the Derby Cabin on the Pike National Forest

4.1.2.c. Public Outreach. Efforts in public outreach were primarily Passport in Time (PIT) projects in 2009. Three of these were on the Comanche National Grassland and included paleontological excavations and archaeological site survey in the Picket Wire Canyonlands and additional archeological survey in the Little Black Mesa area. Also, a site stewardship and monitoring program was begun using volunteers throughout Colorado; these volunteers periodically check the condition of archeological sites in areas such as the Picketwire and Picture Canyons. Passport projects on the Pike National Forest were site surveys near Guanella Pass and in the Pole Creek area south of the Buffalo Peaks. Also, PIT volunteers aided with the cleaning, analysis and curation of artifacts collected during field work conducted on the Forests and Grasslands in 2009; this project was located at the Monument Curation Facility in Monument, Colorado. PIT and other volunteer projects are designed to use volunteers to accomplish work that the PSICC could not do using appropriated funds.

4.1.2d.Accomplishments. Accomplishments in resources interpreted and protected, and in public outreach opportunities, generally continued at the same levels as in FY07 and FY08. A summary of accomplishments can be found in Table 11.

Table 7. Heritage Resources Accomplishments, 2000 – 2009

Heritage Activity	FY99	FY00	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09
Heritage sites interpreted	12	24	14	9	8	7	8	9	8	7	5
Public participation projects	8	7	7	6	7	7	8	7	7	7	8
Number of properties (cumulative)	3,056	3,406	3,766	4,022	4,284	4,689	5,007	5,267	5,517	5,752	5,956
Heritage sites preserved & protected	156	174	152	144	148	145	138	142	140	136	136
Heritage sites evaluated	265	437	360	345	295	289	312	316	298	302	278
Resource facilitation projects	158	142	137	142	169	175	210	207	215	221	262
Inventory/acres surveyed	10,246	14,700	23,435	28,000	19,879	28,966	17,631	10,483	9,870	9,576	9,223

4.2. Recreation

2010 Recreation Monitoring Report

On the PSICC there are a variety of recreation experiences, everything from Wilderness, to: scenic byways, wild and scenic rivers, developed camping and picnicking, dispersed camping, trail riding, hiking, fishing, National Scenic and/or Historic Trails, cabin rentals, a Christmas tree program, guided tours, outfitter and guide services, high mountain lakes, rock climbing, X-country or downhill skiing, Picket Wire Canyon Auto Tours and many other activities for our

visitors. From the mid-grass prairies of western Kansas all the way to up to the crest of the Continental Divide the PSICC offers challenges and opportunities for everyone.

National Visitor Use Monitoring or NVUM is the system developed by the Forest Service to monitor and estimate recreation visitor use. The national goal is to re-inventory each National Forest on a five year cycle. On the PSICC, NVUM was initially conducted in 2001 and 2006 NVUM will be the standard monitoring protocol used to better understand the public's use of, value of and satisfaction with National Forest System recreation opportunities. The PSICC is scheduled for inventory again in 2011.

The PSICC trails the only White River NF, and Arapaho Roosevelt NF and the National Forests in North Carolina in total visitation. Much of that can be attributed to its location near the growing Denver, Colorado Springs and Pueblo metropolitan areas. The Interstate 70 and 25 highway corridors provide easy access to the PSICC Figure ##### shows a break down of the visitation.

VISIT TYPE	Pike & San Isabel	Comanche & Cimarrron	
Total NF (NG) Visits	5,809,200	371,200	
Wilderness Visits	170,300		
Special Events	47,700		
TOTAL SITE VISITS	6,415,600	406,300	

Figure 8. PSICC Visitor Use (2006 NVUM data

The difference between National Forest Visits and Site Visits indicates that visitors are going to more than one location during a visit to the National Forest.

Tables 14a, and 14b. list activity types and participation compiled from the FY 2006 NVUM report. The top five recreation activities continue to be; viewing natural features, relaxing, viewing wildlife, driving for pleasure, and hiking/walking. New numbers will be available during the spring of 2012.

Table 8a. Activity participation for the National Forests (2006 NVUM)

Activity	Percent particip.	Activity	Percent particip.
Camping in developed sites (family or group)	4.4	Off-highway vehicle travel (4-2heelers, dirt bikes, etc.)	7.0
Primitive camping	6.7	**Driving for pleasure on roads**	**35.5**
Backpacking, camping in unroaded areas	1.5	Snowmobile travel	2.3

Activity	Percent particip.	Activity	Percent particip.
Resorts, cabins & other accommodations on FS managed lands (private or FS run)	3.2	Motorized water travel (boats, ski sleds, etc.	.5
Picnicking and family day gatherings in developed sites (family or group)	4.6	Other motorized land/air activities (plane, other)	.5
Viewing wildlife, birds, fish, etc., on NFS lands	**42.6**	**Hiking or walking**	**36.8**
Viewing natural features such as scenery, flowers, etc., on NFS lands	**61.7**	Horseback riding	2.3
Visiting historic and prehistoric sites/area	8.1	Bicycling, including mountain bikes	3.1
Visiting a nature center, nature trail or visitor information services	3.3	Non-motorized water travel (canoe, raft, etc.)	.5
Nature study	5.3	Downhill skiing or snowboarding	7.2
General/other – relaxing, hanging out, escaping noise and heat, etc.	**44.4**	Cross-country skiing, snowshoeing	4.8
Fishing – all types	17.1	Other non-motorized activities (swimming, games and sports)	1.3
Hunting – all types	8.4	Gathering mushrooms, berries, firewood, or other natural products	1.4

Table 8b. Activity participation on the National Grasslands (2006 NVUM)

Activity	Percent particip.	Activity	Percent particip.
Camping in developed sites (family or group)	1.1	Off-highway vehicle travel (4-2heelers, dirt bikes, etc.)	24.7
Primitive camping	1.2	**Driving for pleasure on roads**	**52.2**
Backpacking, camping in unroaded areas	.1	Snowmobile travel	0
Resorts, cabins & other accommodations on FS managed lands (private or FS run)	0	Motorized water travel (boats, ski sleds, etc.	0
Picnicking and family day gatherings in developed sites (family or group)	28.2	Other motorized land/air activities (plane, other)	0

Activity	Percent particip.	Activity	Percent particip.
Viewing wildlife, birds, fish, etc., on NFS lands	**70.2**	**Hiking or walking**	**83.3**
Viewing natural features such as scenery, flowers, etc., on NFS lands	**63.7**	Horseback riding	.1
Visiting historic and prehistoric sites/area	55.9	Bicycling, including mountain bikes	.5
Visiting a nature center, nature trail or visitor information services	32.3	Non-motorized water travel (canoe, raft, etc.)	0
Nature study	53.3	Downhill skiing or snowboarding	0
General/other – relaxing, hanging out, escaping noise and heat, etc.	**54.5**	Cross-country skiing, snowshoeing	0
Fishing – all types	.4	Other non-motorized activities (swimming, games and sports)	13.1
Hunting – all types	51.5	Gathering mushrooms, berries, firewood, or other natural products	.1

Developed Recreation

Many recreation visits occur at developed facilities, particularly campgrounds, and day use areas (see Table 15). On the Pike and San Isabel National Forests the majority of the recreation facilities, including all of the fee sites are managed for the Forest Service by concessionaires. The PSICC has been using concessionaires since 1993. Two different companies manage over 100 sites. In 2009 they generated $1.57 million in revenue. This resulted in fees to the government of approximately $110,000 to be used on deferred maintenance projects. One permit was re-issued in January 2009. The second permit will likely be re-issued in 2012. This revenue is a 7% increase over 2008. Although revenue is not directly correlated to use levels, it is safe to assume that there is a corresponding increase in visitation. Some of this increase can be attributed to the recent economic crisis, and an increase in camping as a low cost, family oriented vacation. Some of the increase on the PSICC may also be a factor of the impacts of the bark beetle infestation on northern forests and closing of campgrounds along the I-70 corridor, forcing people to travel further for camping opportunities.

On the Cimarron National Grassland only the Cimarron Recreation Area, with group picnic facilities and a campground generate revenue. Several scenic overlooks, two trailheads and a picnic area provide access to the Santa Fe National Historic Trail. There are no fee sites on the Comanche National Grasslands, although there are guided tours into Picket Wire Canyon during spring and fall weekends.

In 2009 there was a slight decrease in developed camping capacity in recreation site capacity.

On the South Platte Ranger District the Jackson Creek Campground was closed. This resulted in a loss of 9 campsites. On an annual basis that is a loss or 990 camping nights. While on the San Carlos District, the Davenport Campground was re-opened in July. This added approximately 700 camping nights.

Implementation of the 2007 Recreation Facility Analysis will continue in 2010 and may include closing of four (4) more campgrounds.

The PSICC is continuing with its Historic Cabin Rental Program. Four (4) cabins were available in 2009. In 2010, the Crescent and Dawson Cabins will be available for rent beginning May 1. This program generates about $22,000 revenue annually which is used to make additional cabins available. All of the sites provide visitors with unique opportunities to experience "living" history, such as old homesteads, mining camps or Forest Service Guard Stations. There is a host of other cabins that can be added and made available to the public.

Table 9. Percentage of User Satisfaction (from FY 2006 NVUM report)

	Satisfied Survey Respondents (%)					
	Developed Sites[b]		Undeveloped Areas (GFAs)		Designated Wilderness	
Items Rated	National Forest	National Grassland	National Forest	National Grassland	National Forest	National Grassland
Developed Facilities (includes restroom cleanliness and facility condition)	90.8	94.2	77.9	80.2	93.8	n/a
Access (includes parking availability, parking lot condition, road condition and trail condition)	91.9	97.3	78.6	75.4	87.1	n/a
Services (includes availability of information, signage, employee helpfulness)	81.5	84.6	77.6	60.7	82.9	n/a
Perception of Safety	97.3	100.0	96.3	100.0	90.9	n/a

Table 10. Percentage use of facilities and specially designated areas on PSICC (from FY 2006 NVUM report

	Respondents who used this item (%)	
FACILITY/ Area	**National Forest, FY 2006**	**National Grassland, FY 2006**
Developed Swimming Site	4.9	0.0
Scenic Byway	25.1	0.4
Visitor Center or Museum	12.9	40.3
Designated ORV Area	17.2	33.9

	Respondents who used this item (%)	
FACILITY/ Area	National Forest, FY 2006	National Grassland, FY 2006
Forest Roads	23.2	7.2
Interpretive Displays	10.6	45.6
Information Sites	13.2	41.1
Developed Fishing Site	4.0	0.4
Motorized Single Track Trail	7.9	0.0
Motorized Dual Track Trails	19.8	2.4
None of these Facilities	48.6	8.0

Recreation facilities backlog

The PSICC has a strong recreation component in its overall program. The PSICC is classified as an "Urban National Forest" because of the more than four million people living within an hour's drive. This Forest is most heavily used on weekends as a result of the proximity to Colorado "Front Range" population. Many of the developed campgrounds, which were built in the 1960s, are deteriorating. In 2007 the Recreation Facility Masterplan, identified a deferred maintenance backlog of $7.2 million dollars. The agency defined a goal of a 25% reduction over the next five years

In FY09 the PSICC received an additional $1 million of "RSI Funds" to target the deferred maintenance backlog on the Forests. Repair and maintenance of the existing infrastructure will continue to be the focus of our capital improvement funds, in lieu of building entirely new facilities. Health, safety and sanitation projects will take priority. Increasingly stringent Colorado state water quality requirements will require an emphasis on upgrading and improving water systems.

Winter sports

In general, downhill skiing use has leveled off nationwide. However on the PSICC, Monarch Mountain Ski Resort and Ski Cooper both saw increases from the 2008-09 season to the 2009-2010 seasons. Ski Cooper had 54,000 skier days, a modest 6% increase from the previous season. Monarch saw a significant increase of 10%, from 165,719 skier days to a total of 184,725 days. Use number changes in any given year are a result of the fluctuations in snow accumulations. The two ski areas on the PISCC had a total of 242,727 skier visits during the latest ski season

Dispersed recreation: General Forest Areas

Because of the PSICC's proximity to the Denver, Colorado Springs, and Pueblo metropolitan areas, there continues to be a large amount of dispersed recreation use.

Dispersed recreation constitutes the largest share of total recreation use. In recent years, visitor levels have exceeded projections made in the 1984 Plan. The FY 2006 NVUM report lists many activities that fall into the Dispersed Recreation Use category (refer to Table 13a and b). As mentioned in the introduction the top five recreation activities were viewing natural features, relaxing, viewing wildlife, driving for pleasure, and hiking/walking – all of which are considered Dispersed Recreation. Slightly more than 23% of the recreation visits the PSICC involved overnight stays in undeveloped areas. This use is almost 40% higher than use in developed recreation sites.

Immediately following approval of the 1984 Plan, the PSICC recognized the importance of implementing the travel management direction. In the fall of 2005 the Chief of the Forest Service initiated a new Travel Management Rule, in effect eliminating all off-road and trail motorized use. In 2009 the PSICC completed the first round Motor Vehicle Use Maps (MVUM.) A map has now been produced for each Ranger District. These maps will be updated and re-printed yearly.

Wilderness

The PSICC has all or part of nine designated Wilderness Areas, which together total approximately 449,000 acres (Table 18). Several of these wilderness areas cross Forest boundaries; the PSICC is the lead manager for three of those. In the Colorado Wilderness Bill (H.R. 4289), 127,000 acres of additional Wilderness are proposed, as sponsored by Representative DeGettee. Those acreages include the Brown's Canyon, Grape Creek, Badger Creek and Beaver Creek Areas. The Forest is uncertain when or if any actual designation may occur. In 2004 the Forest Service identified 10 management actions that would be completed for each Wilderness in the system over a 10-year period that culminates with the 50th anniversary of the Wilderness Preservation Act. The PSICC continues to implement the Wilderness Strategy.

The 2006 NVUM Report estimated 170,000 Wilderness visits on the PSICC. This is almost a 3-fold increase from the previous inventory in 2001. There are however no designated Wilderness Areas on the two National Grasslands.

Table 11. Designated Wilderness areas on the PSICC

Wilderness Area	Designation Date	National Forest	Approximate PSICC acreage
Buffalo Peaks	January 1993	Pike and San Isabel	43,410
Collegiate Peaks	November 1980	San Isabel, Gunnison, White River	106,620
Greenhorn Mountain	January 1993	San Isabel	22,040
Holy Cross	November 1980	San Isabel, White River	15,000
Lost Creek Lost Creek Wilderness addition	June 1980 January 1993	Pike	58,040 14,700

Wilderness Area	Designation Date	National Forest	Approximate PSICC acreage
Mount Evans	June 1980	Pike, Arapaho	34,680
Mount Massive	October 1979	San Isabel	26,100
Sangre de Cristo	January 1993	San Isabel, Rio Grande	226,455
Spanish Peaks	February 1999	San Isabel	18,000

Routes for climbing peaks over 14,000 feet have become particularly popular and heavily used. The FY 2009 NVUM report estimated wilderness use at 67,000 visits, with an average stay of 1.6 days per visit (based on a 25.2 hour average length of stay) or approximately 134,000 recreation visitor days (RVDs).

Scenic Resource

Scenic quality continues to be maintained. Activities with the potential to adversely affect the scenic integrity have been carefully designed to minimize those affects. The new Scenery Management System (SMS) will be implemented following the completion of revision of the 1984 Plan.

Direction in the Built Environment Image Guide[3] (BEIG) is followed to ensure that new buildings, signs, or other human-made features compliment the natural and cultural settings.

4.4. Travel Management

Travel management is a persistent and growing topic of concern for the PSICC. Increasing population pressures and increased sales and use of off-highway vehicles are resulting in greater resource impacts and potential for conflict. Unmanaged recreation has been identified as one of the four major threats to long-term forest health, and off-highway vehicle use constitutes a significant component of this threat.

Roads analyses have been conducted in several locations at the watershed and multiple-watershed scales, including the Hayman burn area. In addition, Forest-scale roads analysis was completed on the Grasslands in FY 2004 as part of the 1984 Plan revision effort. A Forest-scale travel analysis (TAP) is currently being conducted for the Pike and San Isabel National Forests, in conjunction with the revision of the 1984 Plan. The anticipated completion date for the TAP is October, 2009.

In FY2009 the PSICC commenced the South Rampart Travel Management Plan & Environmental Assessment, which is a consultant-led effort encompassing approximately 122,000 acres within the Pikes Peak Ranger District. This work will complement the North Rampart travel management plan & NEPA, completed in July 2005, with implementation on-going.

[3] USDA-Forest Service. 2001. FS-710. The Built Environment Image Guide for the National Forests and Grasslands. Washington, D.C.

The PSICC's goal is to identify, classify, and prioritize travel management planning efforts, from highly-intensive and costly projects such as Rampart Range to smaller, incremental improvements in areas that do not warrant this level of investment. The lower level investments represent geographic areas that are in a reasonably sustainable condition, which generally occurs when topography limits the users' ability to travel cross-country. Such areas may have more specific, focused needs to address, such as user conflict, jurisdictional issues, watershed issues, etc.

Funding constraints will continue to hamper the PSICC's ability to pursue travel management planning and implementation to the extent desired. Difficult decisions must be made relative to apportionment of funding to this effort versus deferred maintenance, safety, and capital improvement needs. Thus, it is imperative to identify and move forward with those travel management areas with greatest need.

During FY2009, the Motor Vehicle Use Maps (MVUMs) for Salida, South Park and Comanche Ranger Districts were completed. Now that all eight MVUMs have been published and hard copy prints made available at the district offices, the focus on MVUMs will shift to fine-tuning the maps so that they are more user-friendly. As necessary, updated MVUMs will be published in FY2010 and beyond to address corrections, improvements and travel management decisions. Also, the PSICC is working aggressively to improve signage consistency between Districts and motorized use areas.

The PSICC is continuing an aggressive effort to identify and correct errors and inaccuracies in its roads and trails data, including tabular and geo-spatial data. This is becoming increasingly important for travel analysis and planning work. The release of the final travel management rule (36 CFR parts 212, 251,261, and 295) is further elevating the importance of travel management on a nationwide basis. Travel management planning and implementation will be closely tied to revision of the 1984 Plan, given the direct relationship with, and impacts to, all major resource areas.

The total number of miles of National Forest System Roads (NFSRs) on the PSICC is 3,734. Included in the total number of miles of NFSRs are three distinct types of roads. Following is a description of the three types and the number of miles for each type.

1. Roads open for public use: 3,272 miles
   These are the roads that are shown on the MVUM. They are intended to be used by the general public.

2. Roads open for administrative use: 320 miles
   These are roads that are used by authorized Forest Service personnel for administrative purposes. They are also used by designated permittees. They do not show up on the MVUM.

3. Roads closed to all motorized use (Maintenance Level 1): 142 miles
   These are roads that have been placed in storage for extended periods between

intermittent uses. They do not show up on the MVUM.

With continued shortfalls in maintenance funding, additional miles of road are being rendered unsuitable for use by passenger cars and moved into a high-clearance vehicle standard. This reflects a nationwide trend.

5. Economic Components

Capital Investments

The Capital Investment Program (CIP) consists of two parts: one funded at the Regional level, and one funded at the Forest level. Before FY92, CIP was primarily for roads and general purpose timber and recreation use. After FY92, the emphasis shifted to include developed recreation areas and trail construction and reconstruction. PSICC's part of the CIP has been funded in the $250,000 to $500,000 range since 1991. The Regional CIP has been funded in the $700,000 to $2.3 million range, with the lowest funding in 1996 and the highest in 1992. As stated previously, the emphasis has shifted from roads in the early 1990s to developed recreation areas in the late 1990s.

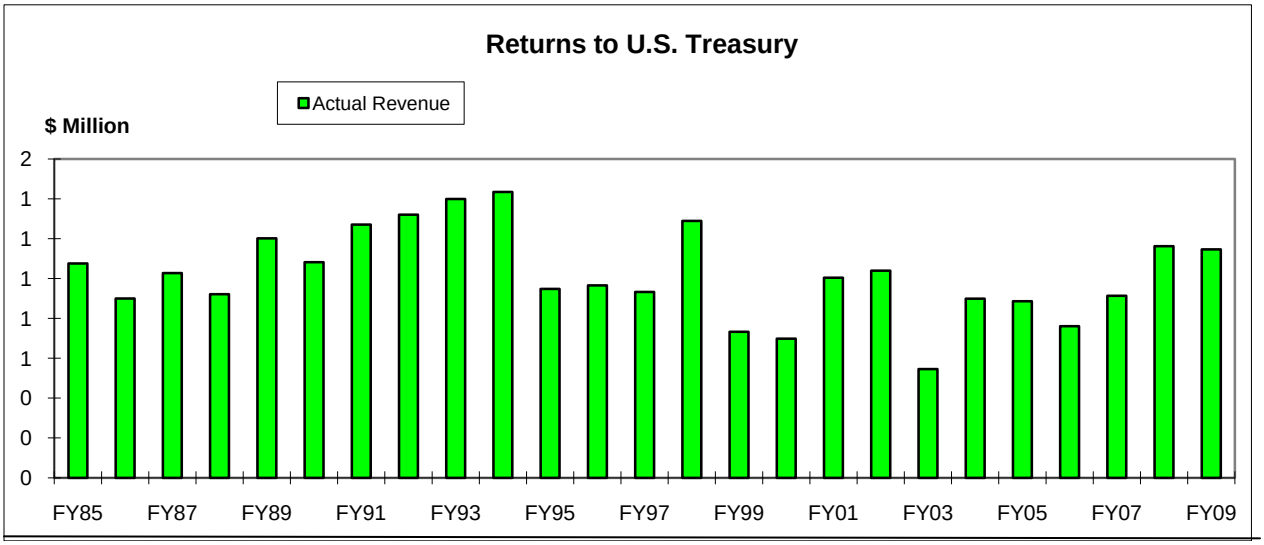

Figure 19. Revenue Returns to the U.S. Treasury

Returns to the U.S. Treasury

A wide range of activities generates revenue for the U.S. Treasury. These include special-use permits (such as ski areas, roads, waterlines, powerlines, outfitter-guides, recreation residences), grazing permits, fuel wood permits, Christmas tree permits, transplant sales, timber sales, and others. Revenues from oil and gas leases are not shown in Figure 18, but are included in Appendix B of this report.

Payments to Counties

The Secure Rural Schools Act gives states and counties payments for the next four years (2008-2011), tied to the amount of national forest land in the country and other factors. Counties designate a portion of the funds to projects reviewed by the resource advisory committee (RAC)

In most cases, 25% of the revenues paid into the U.S. Treasury are returned to the counties where the revenue-generating activities took place. The flow of these funds to counties is shown in Table 16. The most dramatic change occurred on the Cimarron National Forest in 1987, when a number of oil and gas leases reverted to the United States. Revenues from those leases have declined in recent years as production has declined.

Table 12. 25% Fund Payments to Counties by Proclaimed Units and the Secure Rural Schools.

Nominal Year Dollars					
Fiscal Year*	**Pike**	**San Isabel**	**Comanche***	**Cimarron***	**PSICC Total**
FY85	115,898	123,019	145,707	77,852	**462,476**
FY86	103,787	107,703	103,185	39,027	**353,702**
FY87	105,173	130,414	72,730	4,240,391	**4,548,708**
FY88	92,751	119,698	45,236	3,028,349	**3,286,034**
FY89	127,780	149,169	47,240	1,514,045	**1,838,234**
FY90	122,124	127,901	64,605	1,007,529	**1,322,159**
FY91	134,263	149,236	111,347	541,837	**936,683**
FY92	117,394	172,006	106,777	428,047	**824,224**
FY93	157,919	152,076	106,463	737,839	**1,154,297**
FY94	162,181	175,534	59,587	785,574	**1,182,876**
FY95	91,038	134,596	117,975	503,049	**846,658**
FY96	94,520	142,053	221,394	627,538	**1,085,505**
FY97	92,591	120,173	632,708	170,706	**1,016,178**
FY98	157,857	149,073	71,530	473,494	**851,954**
FY99	92,481	90,829	0	0	**183,310**
FY00	94,249	73,177	0	0	**167,426**
FY01	127,424	180,922	71,617	516,309	**896,272**
FY02	142,743	183,219	72,637	983,052	**1,381,651**
FY03	140,170	184,712	47,166	505,867	**877,915**
FY04	160,996	196,439	19,757	917,822	**1,295,014**
FY05	180,689	203,368	77,932	750,020	**1,212,009**
FY06	181,494	205,395	76,157	1,161,741	**1,624,788**
FY07	187,403	204,973	84,791	975,155	**1,452,321**
FY08	992,480	1,879,734	88,010	1,445,794	**4,406,018**
FY09	43,955	153,508	58,255	621,219	**876,937**

*** Note: Grassland revenues and payments are reported by calendar year rather than fiscal year.**
*** Note: Counties can receive more funding starting in FY08 through FY11, because the Secure Rural Schools law.**

6. Amendments to the 1984 Land and Resource Management Plan

6.1. Existing Amendments

There were 32 existing amendments (through FY 2008) to the 1984 Plan as shown in Table 17. For several years following approval of the 1984 Plan, it was believed that changes in the timber harvest schedule had to be reflected as amendments. When court decisions clarifying the purposes of land and resource management plans established that this practice was not required, amendments of this nature were discontinued. The last 1984 Plan amendment that was completed during the fiscal year was signed in January 2009.

Table 13. Summary of amendments to the 1984 Plan

Amendment #	Date Approved	Summary
1	09/23/1985	Clarified intent of Plan implementation schedules (Appendices A, C & D) prepared as part of annual Forest Plan of Work. Rescinded by Amendment No. 9.
2	07/24/1987	Corrected omission and indicated that bridge construction and reconstruction activities under Management Activity L16–L18 (Local Road Construction and Reconstruction) are included.
3	07/24/1987	*Revised boundary of the Comanche Lesser Prairie Chicken Habitat Zoological Area (designated a Colorado Natural Area February 13, 1987).*
4	7/24/1987	Included in the Plan assessment of suitability and capability of Quail Mountain for proposed ski area development. Rescinded October 5, 1987.
5	07/24/1987	Incorporated in the Plan, modified stipulations and supplements contained in FSM 2800 5/86 Supplement No. 25 for leases and permits issued on National Forest System lands.
6	07/24/1987	Replaced fire management Standards and Guidelines with Regional fire management requirements that had been changed to provide greater flexibility to land managers.
7	07/24/1987	Corrected a Plan map error to more accurately reflect Management Area Prescription application and changed acreage totals in the Management Area Summary Table.
8	07/24/1987	Corrected information in the Plan – Appendix B; fuelwood products are not a part of the Allowable Sale Quantity (ASQ).

Amendment #	Date Approved	Summary
9	07/24/1987	Rescinds Forest Plan Amendment No 1.
10	07/24/1987	Assigned Management Area Prescription 1D (Provided for Utility Corridors) for certain lands within the Comanche and changed Management Area Summary Table III-3 to show a change in the acreage of four Management Areas.
11	08/20/1987	Replaced Appendix A (Ten-year Timber Sale Schedule) and established a three-year schedule of planned vegetation treatment projects.
12	10/05/1987	Replaced Appendix C (Ten-Year Road Construction and Reconstruction Schedule) and established a three-year schedule of planned road construction/reconstruction projects.
13	12/09/1988	Recommended establishment of the 373-acre Hoosier Ridge Research Natural Area, South Park District.
14	12/09/1988	Assigned Management Area Prescriptions 2B and 4B to 10,290 acres of the Cimarron River corridor on the Cimarron.
15	01/1989	Amendment drafted but not finalized.
16	01/03/1989	Established three-year Timber Sale and Road Construction/Reconstruction Scheduled (revised appendices A & C). (FSM 1920, R2 Supplement No. 8, 03/86 and FSH 1909.12, R2 Supplement No. 1, 08/88).
17	01/03/1989	Assigned Management Area Prescription 5B to Babcock Hole, San Isabel (San Carlos District); 9,021 acres.
18	01/03/1989	Assigned Management Area Prescription 1D to Methodist Mountain, San Isabel (Salida District); 53 acres.
19	03/02/1989	Assigned Management Area Prescription 5B (Emphasis on Big Game Winter Range) in the Dry Union Gulch area, San Isabel (Leadville District) – change from a 7D Management Area Prescription; 5,114 acres.
20	12/06/1989	Replaced three-year Timber Sale and Road Construction/Reconstruction Schedules (revised Appendices A & C). (FSM 1920, R2 Supplement No. 8, 03/86 and FSH 1909.12, R2 Supplement No. 1, 08/88).

Amendment #	Date Approved	Summary
21	06/11/1990	Established Scenic Highway of Legends as a Scenic Byway on the San Carlos District. Incorporated new management direction for Scenic Byways in the Plan.
22	10/04/1990	Replaced three-year Timber Sale and Road. Construction/Reconstruction Schedules (revised Appendices A & C).
23	02/12/1992	Oil & Gas Leasing – Incorporated decision made 02/92 to consent to oil and gas leasing. Reference Final EIS and Record of Decision (ROD).
24	04/09/1992	Added Picket Wire Canyonlands per PL 101-501. Also established management area direction.
25	09/21/1994	Revised Plan map to establish a utility corridor for the Divide Power Line between Divide and Lake George.
26	03/2000	Changes VQO within Ski Cooper permit area to Modification.
27	02/2001	Establishes Stanley Canyon expansion to the Northfield Multi-User Communications Site.
28	08/2001	Amends suitable timber base and certain standards and guidelines in the area of the Upper south Platte Watershed Protection and Restoration Project.
29	06/2002	Amends the Forest Plan to establish the Dick's Peak Communication Site.
30	08/2005	Amends the Forest Plan to establish an updated list of Management Indicator Species (MIS)
31	06/2004	Amends the Forest Plan to establish a new management area along the South Platte River between Elevenmile Reservoir and Strontia Springs Reservoir, and along the North Fork of the South Platte River from below Bailey to the confluence with the South Platte River.
32	06/2008	Amends the Forest Plan to designate additional areas where fire managers may use naturally-ignited wildland fires to achieve management objectives. The use of naturally-ignited wildland fires is expanded beyond designated wilderness areas, to all NFS lands in the Wet Mountains, Sangre de Cristo range, and Spanish Peaks.
33	10/28/2008	Amends the Forest Plan to provide consistent Region 2 wide standards and guidelines designed to conserve the Canada lynx in the Southern Rocky Mountains. The amendment contains 7 new standards and 24 new guidelines specifically designed to ensure the conservation of the Canada lynx.

Amendment #	Date Approved	Summary
34	01/24/2009	Amends the Forest Plan to include Section 368 energy corridors. The amendment accepts the ROD for the Westwide Energy Corridors Final Environmental Imapct Statement. The EIS and ROD identified preferred locations for energy corridors that minimize impacts to lands and surface resources.

6.2. Identified Need to Change the 1984 Plan through an Amendment or Revision

6.2.1. Amendments to the 1984 Plan

In FY 2009 there were two new amendments approved for the 1984 Plan; Amendment 33 and Amendment 34. Amendment 33 established 7 new plan standards and 27 new plan guidelines intended to protect the Canada lynx throughout the Southern Rockies. Amendment 34 accepted the analysis provided in the Westwide Energy Corridors Final Environmental Impact Statement. The Westwide Energy Corridors FEIS/ROD established priority corridors for energy development throughout the west. One of the identified corridors passes through the PSICC and is officially designated a nationwide priority energy corridor through the approval of this amendment.

6.2.2. Revision of the 1984 Plan

In FY 2009 two revisions to the 1984 Plan were underway: 1) the development of a land management plan for the Cimarron and Comanche National Grasslands (Grasslands); and 2) a revised Plan for the Pike and San Isabel National Forests (Forests).

Work on the Grasslands Plan, originally prepared under the 2005 National Forest System Land Management Planning Rule (Planning Rule), was suspended following a court order enjoining the Forest Service from implementing the 2005 Planning Rule. This suspension began during the 30-day pre-decisional review and objection period conducted by the PSICC in March 2007.

The revised Forests Plan pre-work was initiated in 2005, and revision efforts continued until these activities were also suspended by the same court order described above. Prior to suspension, a series of eight public workshops was held in various locations. The purpose of these workshops was to gather information regarding Forests resources and resource management and what does and does not need to change. The scheduled completion for the final Forests Plan was changed to September 2011.

The 2008 Planning Rule was enjoined by the 9th circuit. The 9th circuit rule enjoinment effectively stopped all planning under the 2008 Rule. The PSICC considered reworking the existing 2008 Planning Rule documents to conform to the 1982 Planning Rule and starting plan revision under that rule. But the Forest decided the uncertainties associated with working under

an interim planning rule were too great, and rather than get caught between Planning Rules again, the PSICC chose to wait for the new Planning Rule before embarking on Plan Revision once again.

For more details, see the Web site at
http://www.fs.fed.us/r2/psicc/projects/forest_revision/index.shtml.

7. Information Sources for the Annual Monitoring Report

The information in this FY 2008 annual monitoring report is based on the PSICC Management Attainment Reports, Final Budget Documents, INFRA (Infrastructure) database, SILVA (silviculture) reports, NVUM (recreation uses), Regional Revenue and 25% Payments to Counties reports, individual program accomplishment reports, and other miscellaneous documents. All referenced documents are available for review at the PSICC Supervisor's Office located at:

Pike and San Isabel National Forests
Cimarron and Comanche National Grasslands
Supervisor's Office
2840 Kachina Drive
Pueblo, CO 81008

Additional copies of this report are available by writing to or visiting the address above, by calling 719-553-1400, or on the Web at http://www.fs.fed.us/r2/psicc.

8. Summary Evaluation and Conclusions

8.1. Are the 1984 Plan's goals and objectives being met?

Although the goals and objectives of the 1984 Plan are being pursued to some degree, the rate of accomplishment is different than predicted in 1984. The ambitiousness of the overall program has proven to exceed the available funding levels during the years of implementing the 1984 Plan. In addition, the economic conditions and social demands for goods and services have also changed.

8.2. Are the 1984 Plan standards and guidelines being followed?

Decision documents signed by responsible officials certify that projects are designed to be consistent with the 1984 Plan, as amended. Monitoring results support those findings

9. References

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10. List of Preparers

This annual monitoring report was prepared and reviewed by staff and resource specialists on the PSICC (Table 22).

Table 14. List of preparers, by program.

Program(s)	Program manager or specialist
Air	Mike Smith
Aquatic and riparian resources	Matt Comer
Budget and finance	Joe Douglass
Fire and fuels	Aaron Ortega
Heritage	Al Kane
Hydrology, soils	Dana Butler
Land management planning	John Dow
Minerals and Energy Resources	Wyoma Hansen
Range	Scott Woodall
Recreation, scenery, wilderness, visual resource management	Neal Weierbach
Timber	Gary Roper
Transportation	Jerry Stevenson
Water rights	Misty DeSalvo
Wildlife, fisheries, and rare plants, threatened, endangered, and sensitive species	Matt Comer, Stephanie Shively, Mike Welker

Appendix A

Timber Harvest History, 1987 through 1998

Table A-1. Timber harvest history, 1987 through 1998 (cutting method and acres harvested).

	Cover type and cutting method	87	88	89	90	91	92	93	94	95	96	97	98	Total acres
Ponderosa pine														
	Selection	0	0	0	0	0	0	0	0	0	0	0	0	0
	Intermediate cut, sanitation/salvage, commercial thin	170	92	243	243	364	1,312	1,459	1,105	27	0	448	89	5,552
	Clearcut	11	15	27	0	0	0	0	0	0	0	0	0	53
	Preparatory cut (shelterwood)	0	26	0	0	0	0	0	0	0	0	0	0	26
	Seed cut (shelterwood)	83	251	378	428	0	80	113	0	0	0	0	26	1,359
	Removal cut (shelterwood)	47	38	176	67	0	0	0	0	0	0	0	0	328
Aspen														
	Clearcut	40	101	81	85	140	69	73	49	13	7	9	0	968
	Sanitation/salvage	0	0	0	0	0	0	0	5	9	0	0	37	51
Lodgepole pine														
	Clearcut	57	151	43	38	176	47	156	102	54	0	130	14	993
	Seed cut	0	0	0	0	66	107	12	0	0	0	0	0	185
	Removal cut	0	0	0	0	0	0	13	0	0	16	0	0	29
	Commercial thin	0	0	0	0	0	0	0	0	50	0	0	0	50
	Sanitation/salvage	0	0	0	0	0	0	8	0	0	0	0	0	8
Engleman spruce/fir														
	Clearcut	2	64	57	0	150	64	44	0	0	0	0	0	381
	Preparatory cut (shelterwood)	0	255	0	54	30	0	27	0	108	0	0	0	474
	Seed cut (shelterwood)	0	0	34	0	553	0	175	430	0	0	88	88	1,368
	Removal cut (shelterwood)	0	7	0	0	82	0	72	0	0	0	0	23	184

	Cover type and cutting method	87	88	89	90	91	92	93	94	95	96	97	98	Total acres
	Selection (uneven-aged mgmt)	0	286	164	150	27	152	0	0	0	41	65	7	892
	Sanitation/salvage	0	0	0	0	0	0	0	0	0	0	0	0	0
Mixed conifer (Douglas-fir)														
	Intermediate cut, salvage, commercial thin	0	15	1,689	229	47	416	232	232	278	0	208	0	3,346
	Clearcut	0	10	0	0	31	13	4	0	0	0	0	0	58
	Preparatory cut (shelterwood)	0	386	0	0	0	0	0	0	0	0	0	0	386
	Seed cut (shelterwood)	0	0	0	0	56	389	51	0	0	0	0	0	496
	Removal cut (shelterwood)	0	0	59	79	261	0	0	0	0	0	0	0	399
Other species														
	Sanitation salvage, special cut, selection, Christmas trees	0	0	0	0	0		93	16	0	0	0	0	109
Total acres cut		**410**	**1,697**	**2,951**	**1,373**	**1,983**	**2,649**	**2,532**	**1,939**	**539**	**64**	**948**	**284**	**12,076**

Appendix A (cont'd).

Timber Harvest History, 1999 through 2008

Table A-2. Timber harvest history, 1999 through 2008 (cutting method and acres harvested).

	Cover type and cutting method	99	00	01	02	03	04	05	06	07	08	Total acres
Ponderosa pine												
	Selection		0	0	337	80	0	0	0	0	0	417
	Intermediate cut, sanitation/salvage, commercial thin	75	0	180	1,429	1,228	3,150	3,674	1,359	983	606	12,684
	Clearcut	0	0	0	0	0	0	0	0	0	0	0
	Preparatory cut (shelterwood)	0	0	0	0	0	0	0	0	0	0	0
	Seed cut (shelterwood)	0	0	0	0	0	0	0	0	0	0	0
	Removal cut (shelterwood)	300	0	0	83	0	0	0	0	0	0	383
Aspen												
	Clearcut	0	0	0	0	0	0	0	0	0	0	0
	Sanitation/salvage	0	0	0	21	10	0	0	0	0	0	31
Lodgepole pine												
	Clearcut	25	0	0	7	5	0	0	0	0	0	37
	Seed cut	0	0	0	53	0	0	0	0	0	0	53
	Removal cut	0	0	0	0	0	0	0	0	0	0	0
	Commercial thin	0	0	0	5	55	0	0	0	0	0	60
	Sanitation/salvage	0	0	0	220	15	0	191	88	78	44	670
Engleman spruce/fir												
	Clearcut	0	0	0	36	0	0	0	0	0	0	36
	Preparatory cut (shelterwood)	0	0	0	108	0	0	37	36	0	0	181
	Seed cut (shelterwood)	0	0	0	0	0	0	0	0	0	0	0
	Removal cut	0	0	0	0	0	0	0	0	0	0	0

	Cover type and cutting method	99	00	01	02	03	04	05	06	07	08	Total acres
	(shelterwood)											
	Selection (uneven-aged mgmt)	0	0	0	0	0	0	0	0	0	0	0
	Sanitation/salvage	0	0	0	0	0	0	0	0	204	312	516
Mixed conifer (Douglas-fir)												
	Intermediate cut, salvage, commercial thin	290	0	0	59	0	0	434	1,329	148	139	2,399
	Clearcut	0	0	0	0	0	0	0	0	0	0	0
	Preparatory cut (shelterwood)	0	0	0	0	0	0	0	0	0	0	0
	Seed cut (shelterwood)	0	0	0	0	0	0	0	0	0	0	0
	Removal cut (shelterwood)	0	0	0	0	0	0	0	0	0	0	0
Other species												
	Sanitation salvage, special cut, selection, Christmas trees	0	0	10	0	0	0	0	0	0	0	10
Total acres cut		**690**	**0**	**190**	**2,358**	**1,393**	**3,150**	**1,410**	**2,812**	**1,413**	**1,101**	**17,443**

Appendix A (cont'd).

Timber Harvest History, 1987 through 2008

Table A-3. Timber harvest history, 1999 through 2008 (cutting method and acres harvested).

	Cover type and cutting method	Total acres 1987–1998[4]	Total acres 1999–2008[5]	Total acres 1987–2008
Ponderosa pine				
	Selection	0	417	417
	Intermediate cut, sanitation/salvage, commercial thin	5,552	12,684	18,236
	Clearcut	53	0	53
	Preparatory cut (shelterwood)	26	0	26
	Seed cut (shelterwood)	1,359	0	1,359
	Removal cut (shelterwood)	328	383	711
Aspen				
	Clearcut	968	0	968
	Sanitation/salvage	51	31	82
Lodgepole pine				
	Clearcut	993	37	1,030
	Seed cut	185	53	238
	Removal cut	29	0	29
	Commercial thin	50	60	110
	Sanitation/salvage	8	670	678
Engleman spruce/fir				
	Clearcut	381	36	417
	Preparatory cut (shelterwood)	474	181	492
	Seed cut (shelterwood)	1,368	0	1,368
	Removal cut (shelterwood)	184	0	184

[4] Acres taken from Table A-1.
[5] Acres taken from table A-2.

	Cover type and cutting method	Total acres 1987–1998[4]	Total acres 1999–2008[5]	Total acres 1987–2008
	Selection (uneven-aged mgmt)	892	0	892
	Sanitation/salvage	0	516	516
Mixed conifer (Douglas-fir)				
	Intermediate cut, salvage, commercial thin	3,346	2,399	5,745
	Clearcut	58	0	58
	Preparatory cut (shelterwood)	386	0	386
	Seed cut (shelterwood)	496	0	496
	Removal cut (shelterwood)	399	0	399
Other species				
	Sanitation salvage, special cut, selection, Christmas trees	109	10	119
Total acres cut		**12,076**	**17,443**	**29,519**

APPENDIX B PSICC Revenues 1985 to Present

Table B-1. PSICC Revenues 1985 to Present

	National Forest Funds ($)							Trust Funds ($)					
FY	Timber sales	Special uses /2	Mineral leases 3/	Recreation revenue	Grazing fees	Power		K-V funds	Salvage funds	Purchas-er credit	Timber Purchase	Special road const.	Total $
85	76,701	245,505	774,346	301,619	159,918			211,209	0	80,604			1,849,902
86	77,242	232,052	514,733	323,447	93,933			140,503	0	32,897			1,414,807
87	95,106	286,770	17,167,292	323,091	92,629			188,588	0	41,358			18,194,834
88	20,132	272,773	12,222,776	342,096	107,098			110,467	548	68,248			13,144,138
89	67,031	269,855	6,151,595	512,328	154,048			132,262	26,860	38,958			7,352,937
90	56,798	280,321	4,206,179	371,214	129,094			106,459	80,790	57,778			5,288,633
91	66,923	332,516	2,476,165	377,950	173,307			115,195	119,780	84,895			3,746,731
92	32,070	447,066	1,976,099	436,734	207,661			79,496	99,305	18,460			3,296,891
23	153,532	492,503	3,218,247	269,658	195,529			80,045	142,544	65,128			4,617,186
94	112,635	113,258	3,296,673	667,833	119,670			191,398	102,199	127,836			4,731,502
95	108,042	148,345	2,438,829	468,555	60,429			84,106	49,530	28,790			3,386,626
96	179,015	65,642	3,295,406	498,421	73,460			109,114	40,175	0			4,261,233
97	86,869	161,507	3,131,603	490,425	81,569			53,260	59,482	0			4,064,715
98	67,571	483,854	2,118,483	570,171	69,018			54,299	44,418	0			3,407,814
99	33,442	149,670	157	427,176	27,384			68,213	27,197	0			733,239
00	78,324	327,975	203,661	138,361	48,044	26,416		63,402	16,083	0	0	0	902,266
01	73,083	468,512	4,133,042	242,038	66,276	27,979		102,839	20,462	0	403	2,7000	5,137,334
02	60,338	516,540	4,189,001	185,654	68,160	30,993		116,416	47,634	0	13,696	0	5,228,432
03	66,442	281,719	2,168,132	69,321	18,104	21,078		12,264	76,737	0	0	0	2,713,797
04	25,077	476,212	22,159	189,276	20,903	42,627		38,357	106,214	0	0	0	920,825
05	38,539	489,468	29,222	198,937	33,020	40,512		35,762	49,794	0	0	0	915,254
06	22,779	551,960	4,806	7,034	27,021	41,560		44,958	65,927	0	0	0	766,045
07	26,737	645,646	35,432	3,748	24,016	43,187		62,142	62,223	0	0	45,690	948,820
08	21,737	938,684	26,310	0	28,414	44,531		73,118	56,527	0	0	0	1,188,976

[blank]

Certification

The PSICC Land and Resource Management Plan, as currently written, is sufficient to guide implementation for the next year. There are several improvements that can be made to the Plan, but they are not required to meet the goals and objectives of the Plan.

Two revisions to the 1984 Plan were underway in 2009: the development of a land management plan for the Cimarron and Comanche National Grasslands (Grasslands) and a revision of the 1984 Plan for the Pike and San Isabel National Forests (Forests). Both Plan Revisions were being prepared under the 2008 National Forest System Land Management Planning Rule. The draft (proposed) Grasslands Plan was released in December 2005. The pre-decisional review version of the Plan prepared under the 2005 Planning Rule was released in March 2007. The pre-decisional review version of the Plan prepared under the 2005 Planning Rule was released in October 2008. The pre-work phase for the revised Forests Plan was initiated in 2005 and continued throughout 2008 and early 2009. The first round of public workshops to discuss changes in land management that are needed was held in early 2007. The 2008 Planning Rule was enjoined by the 9th Circuit Court of Appeals in June of 2008. This action by the court effectively stopped all planning under the 2008 Planning Rule.

As part of the enjoinment, the court requested the Forest Service stop using the 2008 Planning Rule. The court, however, gave the Forest Service the option to continue plan revisions under the 1982 Planning Rule. The PSICC considered continuing planning under the 1982 Rule but, ultimately, decided to wait for the New Planning Rule in November of 2011. In anticipation of starting the plan in November of 2011 the PSICC decided to update the PSICC Oil and Gas Leasing Analysis EIS. The PSICC Oil and Gas Leasing Analysis is 18 years old and needs to be updated in order to appropriately analyze new species and the potential effects of new technology. The Oil and Gas Leasing Analysis EIS is projected to be completed by the fall of 2012. At that time the PSICC anticipates restarting the plan revision process.

_John F Peterson	02/01/2011
for Jerri Marr	Date
Forest Supervisor	